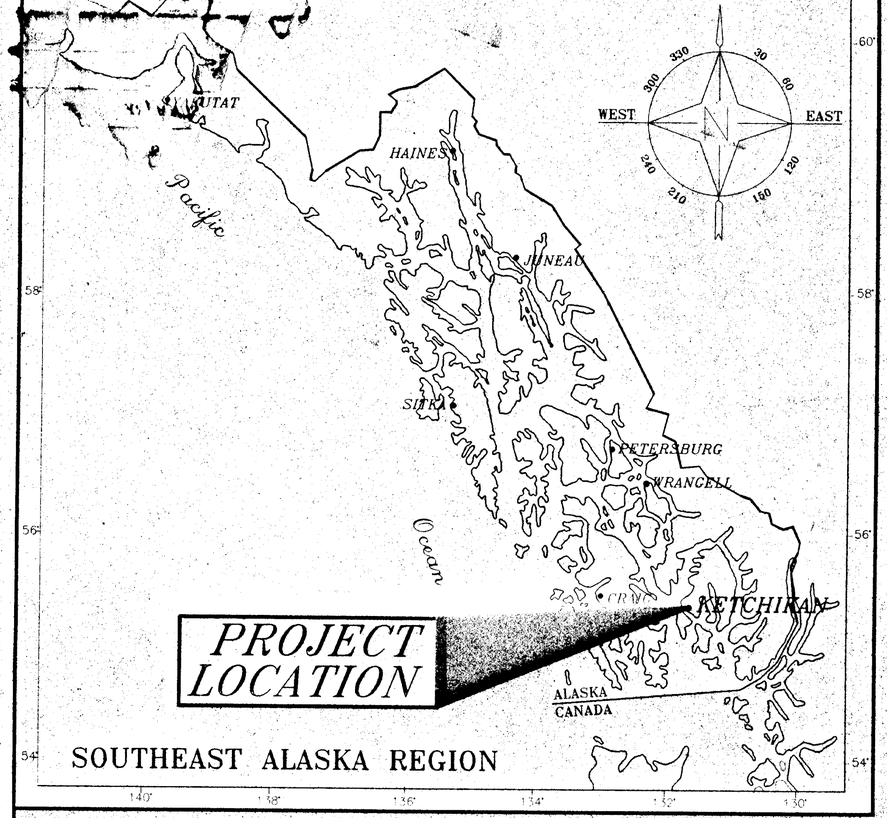


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEAST REGION
DESIGN AND CONSTRUCTION DIVISION

KETCHIKAN, ALASKA
SOUTH TONGASS HIGHWAY

COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH (REBID)

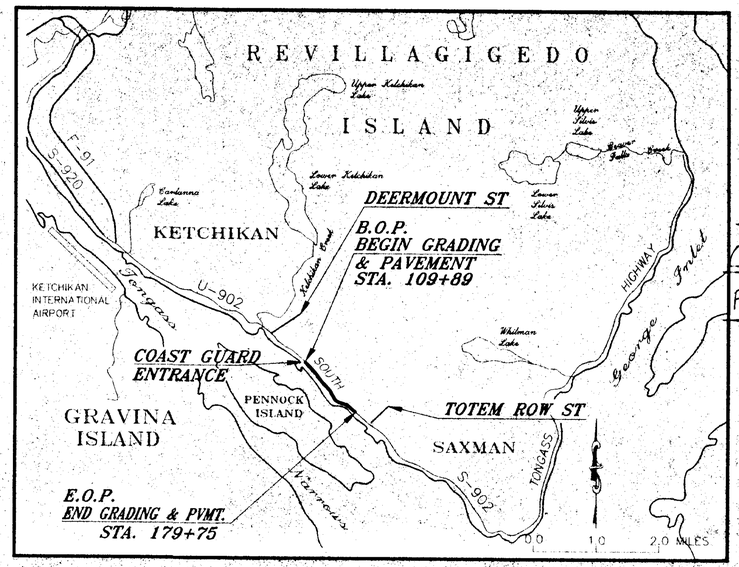
GRADING, PAVING, RETAINING WALL, STRUCTURES & DRAINAGE

PROJECT NO. TE-0902(18) (71372)

SHEET NO	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS
3	TYPICAL SECTIONS SUMMARY
4	ESTIMATE OF QUANTITIES
5	HORIZONTAL CONTROL SUMMARY
6-19	PLAN & PROFILE SHEETS
20	GEOWALL & ROCKERY WALL DETAILS
21	GLULAM PANEL STRUCTURE DETAILS (ALTERNATE NO. 1)
22	SOLDIER POST WALL DETAILS
23	CHAINLINK FENCE DETAILS
24-25	ECCENTRIC LOADER END ANCHORAGE DETAILS
26	DRIVEWAY DETAILS AT STATION 132+25
27	RAMP DETAILS AT STATION 133+00
28	PLAN & PROFILES @ STATIONS 158+50 & 164+50
29-30	MISCELLANEOUS DETAILS
31	SIGNING SUMMARY AND MARKING DETAILS
32-33	EROSION AND SEDIMENT CONTROL PLAN
34	EROSION AND SEDIMENT CONTROL PLAN DETAILS
35	TRAFFIC CONTROL PLAN
36	CONCRETE PANEL STRUCTURE DETAILS (ALTERNATE NO. 2)
37	SAWN TIMBER STRUCTURE DETAILS (ALTERNATE NO. 3)

DESIGN DATA

WIDTH OF PAVEMENT - - - - - - - 8.0'
LENGTH OF PAVEMENT - - - - - - 6,986'(1.32 Mi)
LENGTH OF GRADING - - - - - - - 6,986'(1.32 Mi)
LENGTH OF PROJECT - - - - - - - 6,986'(1.32 Mi)



VICINITY MAP

The following Standard Drawings apply to this project : A-1, C-01.03, C-02.01, C-03.01, D-01.02, D-04.10, D-05.10, D-07.00, F-01.01, F-03.01, G-04.04S, G-04.05W, G-14.04W, G-18.00W, G-18.005, I-20.11, M-05.00, S-00.00, S-05.00, S-20.00, & S-30.01

As Built Plans 1996

Contractor: Rock N Road

Prof. Eng: Allen Shepard

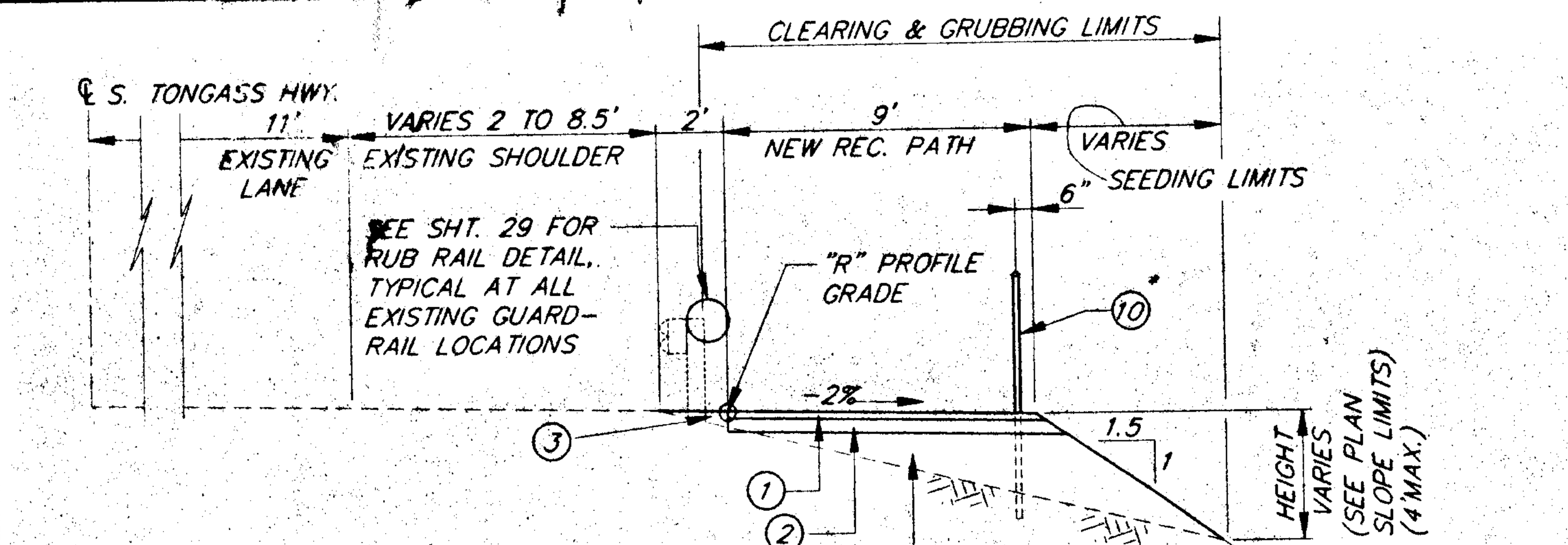
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEAST REGION DESIGN SECTION

APPROVED _____ Date 2/17/95
Regional Preconstruction Engineer

APPROVED _____ Date 2/16/95
Director, S.E. Region Design & Construction

PROJECT NUMBER:	ENGINEER'S SEAL
71372	STATE OF ALASKA 49th W.J. Holbrook CE-6265 REGISTERED PROFESSIONAL ENGINEER
DATE: AUGUST 1995	
SHEET 1 OF 38 ~~37~~	

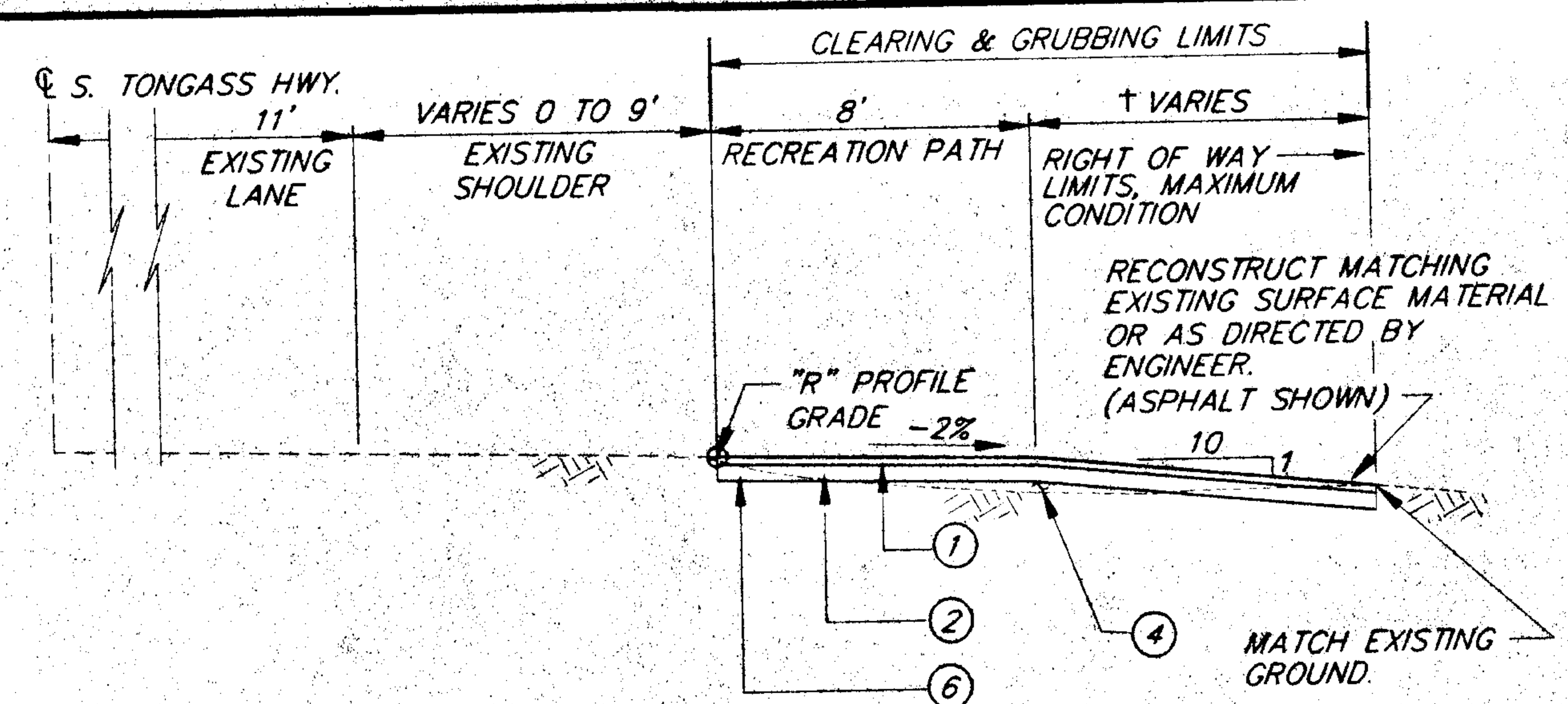
P:\KTN\71372\DR1-TSHT PLOTF.PCP(1) OR PLOTH.PCP(2)



TYPICAL NO. 1

(ROCK FILL)

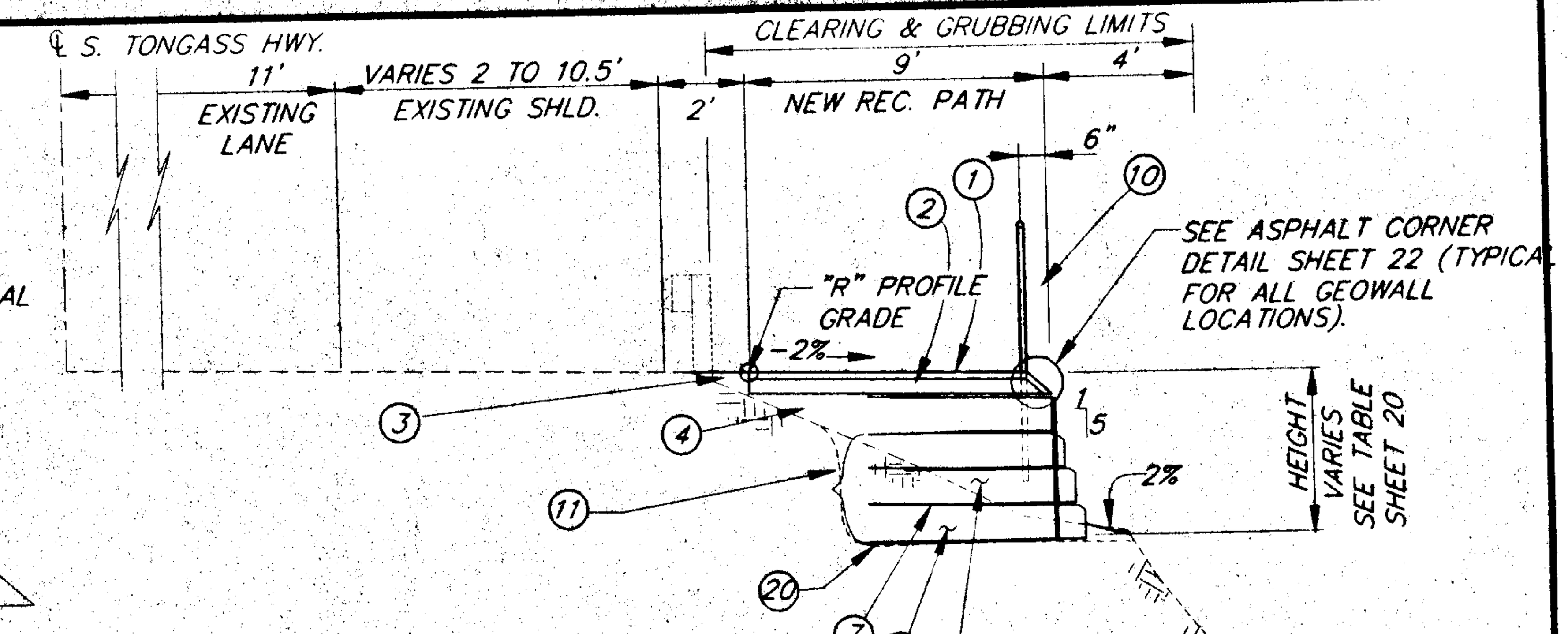
* NOTE:
SEE FENCE SUMMARY TABLE SHEET 23 FOR AREAS OF APPLICATION.



TYPICAL NO. 4

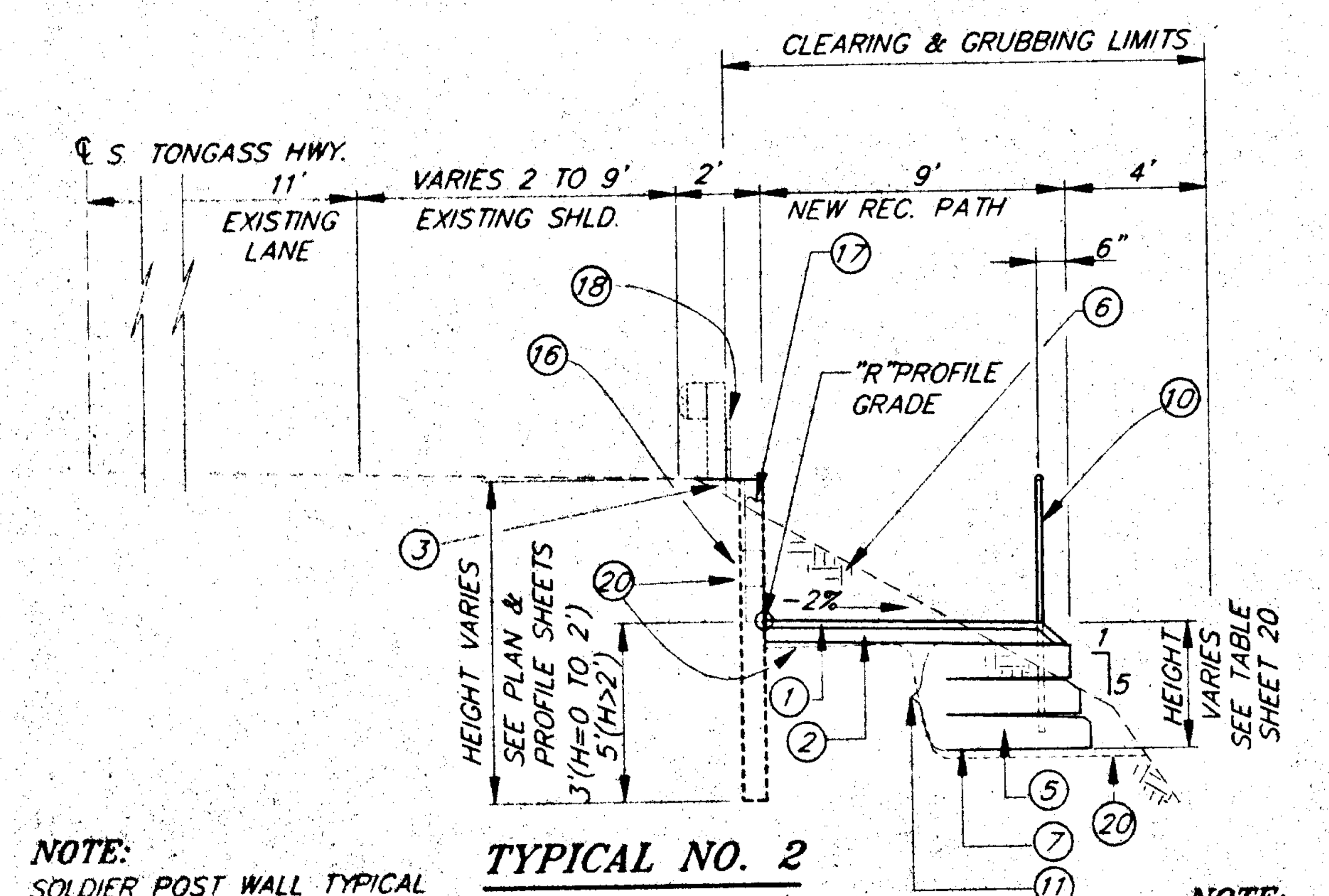
(SOIL FILL)

† SEED IF EXISTING SURFACE IS VEGETATED. USE NO BASE IF SEEDED.



TYPICAL NO. 6

(GEOWALL)

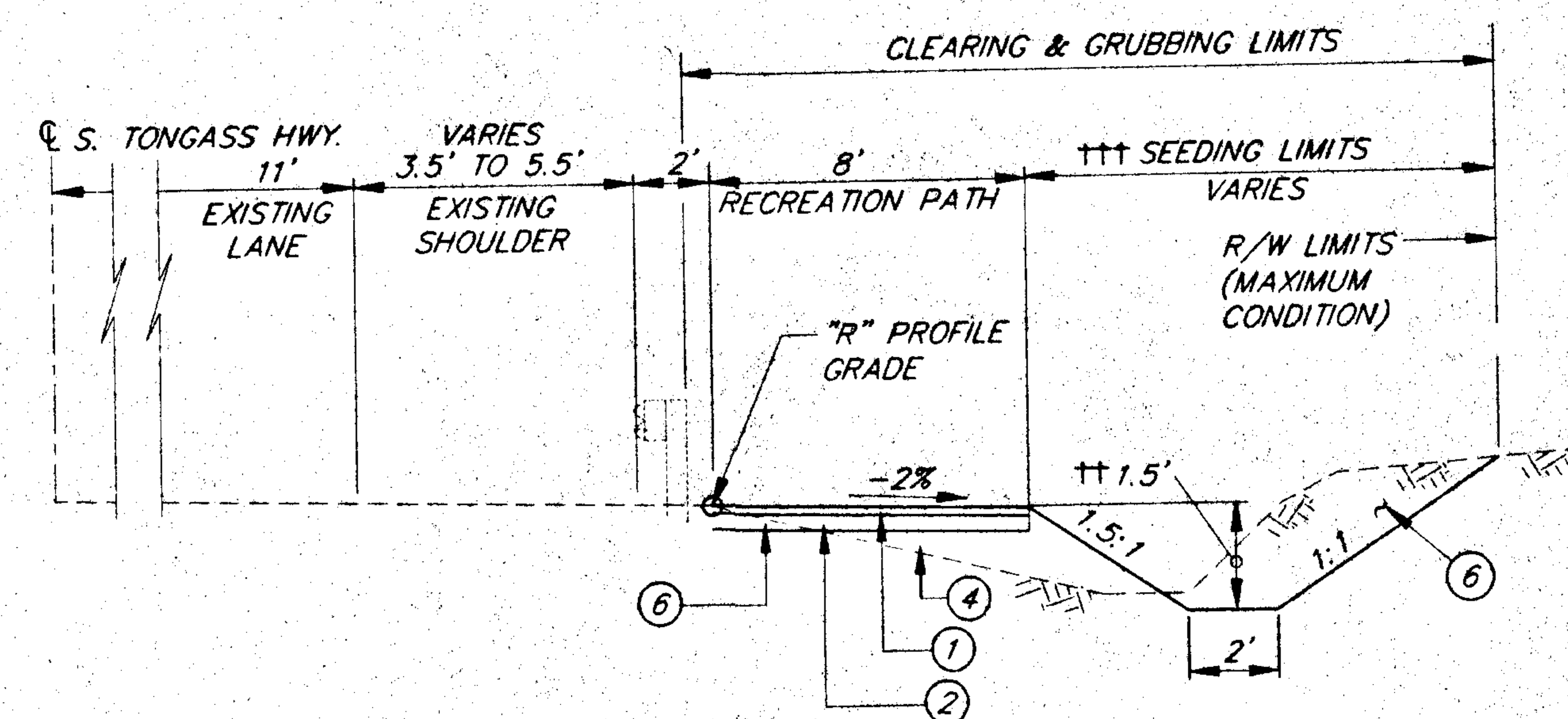


TYPICAL NO. 2

(SOLDIER POST WALL)

NOTE:
SOLDIER POST WALL TYPICAL IS SHOWN IN COMBINATION WITH A GEOWALL (TYP. NO. 6). SEE TYPICAL SECTION SUMMARY, SHEET 3 FOR OTHER TYPICALS AND THEIR APPLICATION WITH SOLDIER POST WALLS.

NOTE:
SHOT ROCK EMBANKMENT WILL BE ENCOUNTERED DURING POST INSTALLATION OPERATIONS FOR BOTH TYPICALS NO. 2 AND 3.

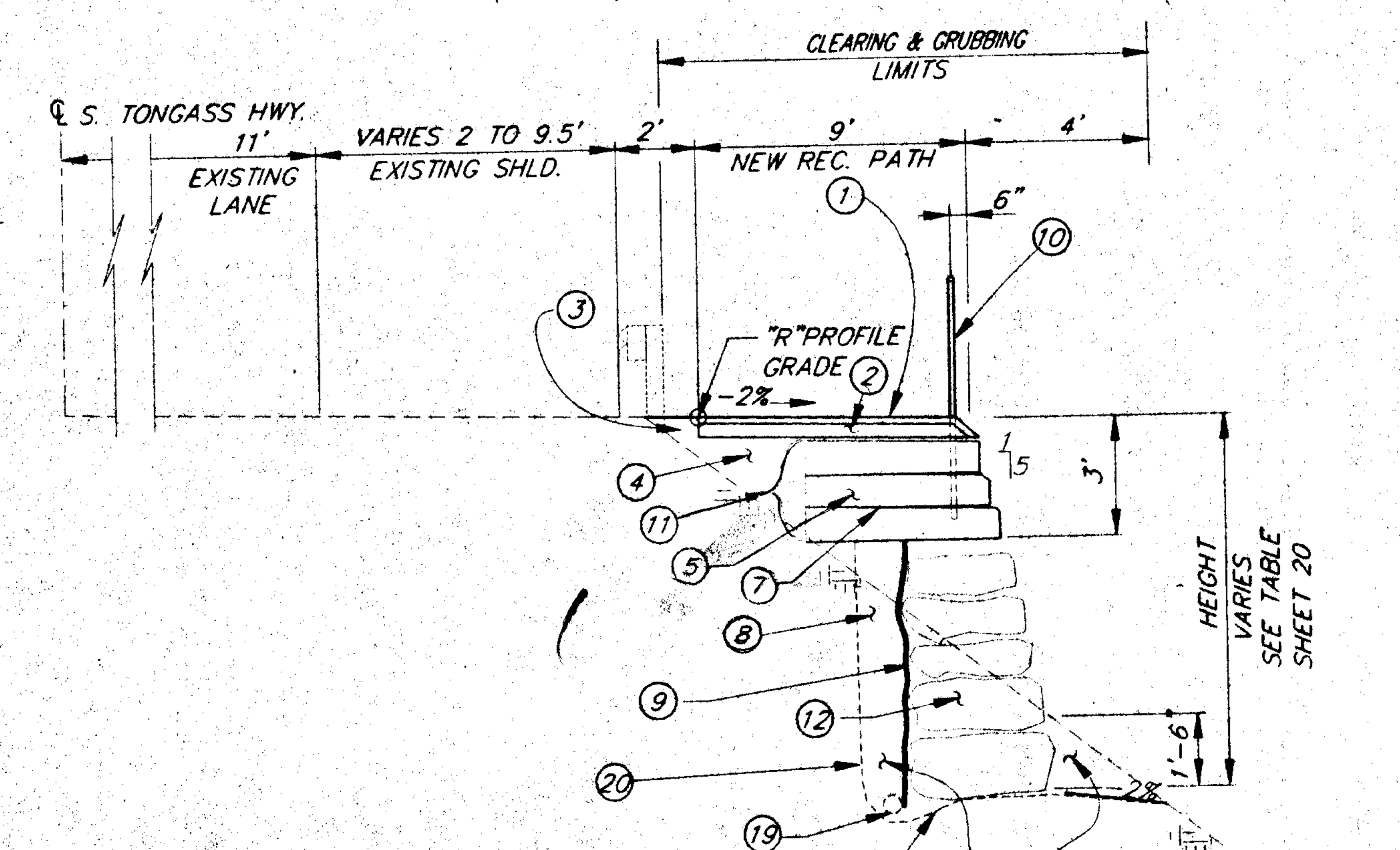


TYPICAL NO. 5

(ROCK CUT)

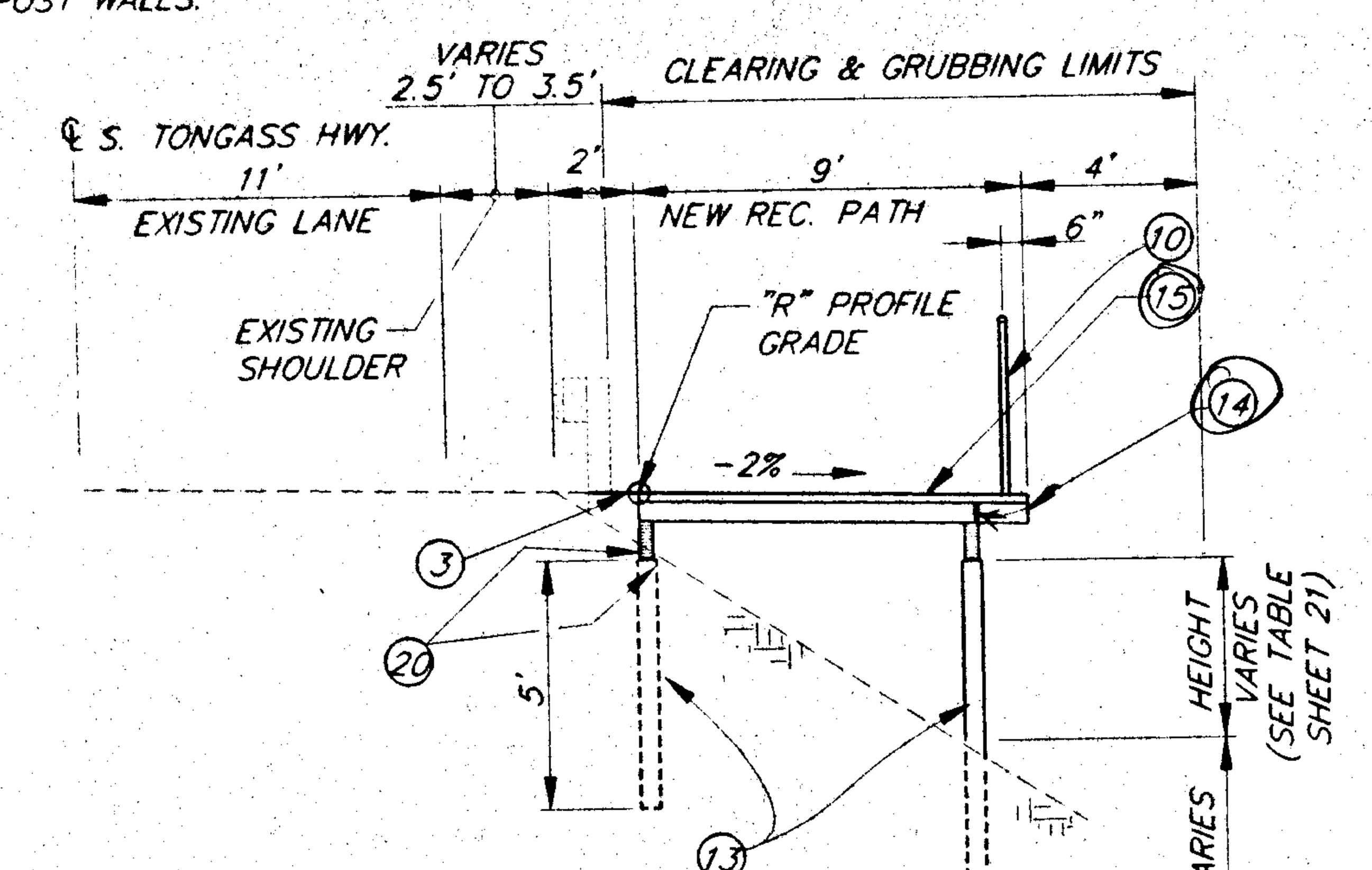
†† SEE PLAN & PROFILE SHEETS FOR SPECIAL DITCH LOCATIONS WHERE HEIGHT VARIES.

††† SEEDING NOT REQUIRED AT ROCK BACKSLOPES



TYPICAL NO. 7

(ROCKERY AND GEOWALL)

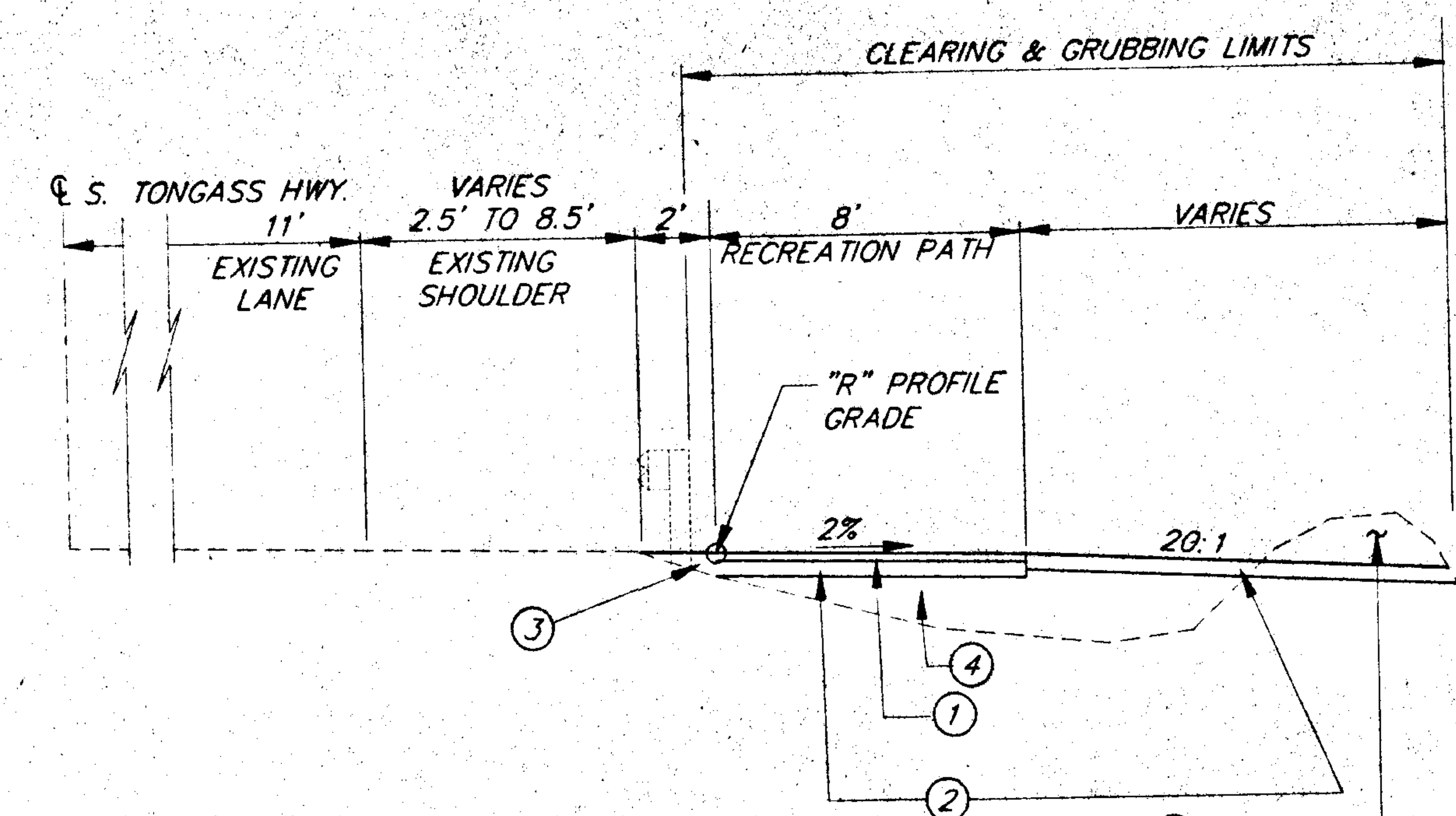


~~TYPICAL NO. 3~~

~~(GLULAM PANEL STRUCTURE)~~ **
~~(ALTERNATE NO. 1)~~

Alt. No. 2, Conc. Panels Pg 36

** NOTE SEE ALTERNATES 2 AND 3 SHEET NO'S. 36 AND 37



TYPICAL NO. 5A

(DAYLIGHT ROCK CUT)

LABELING SUMMARY

1	1 1/2" ASPHALT CONCRETE, TYPE II, CLASS "B"
2	4" CRUSHED AGGREGATE BASE COURSE
3	CRUSHED AGGREGATE BASE COURSE
4	BORROW, TYPE "D" OR USEABLE EXCAVATION (SEE SECT. 203)
5	BORROW, TYPE "E"
6	UNCLASSIFIED EXCAVATION
7	~~GEOGRID~~ Welded Wire Wall (Change Order #1)
8	2" TO 4" QUARRY SPALLS
9	RIPRAP FABRIC
10	CHAINLINK FENCE & POSTS. SEE DETAILS SHEET 23
11	GEOWALL. SEE DETAILS SHEET 20
12	ROCKERY. SEE DETAILS SHEET 20
13	W 6 X 15 GALVANIZED STEEL POSTS. SEE DETAILS SHEET 21
14	~~9" X 5" GLULAM PANEL~~. SEE DETAILS SHEET 36 (Concrete Panel Structure)
15	~~2" x 12" TREATED TIMBER WEARING SURFACE~~. SEE SETAILS SHEET 36
16	W 6 X 15 GALV. STEEL SOLDIER POSTS. SEE DETAILS SHEET 22
17	3" X 12" TREATED TIMBER GLULAM LAGGING. SEE SHEET 22
18	2" X 8" TREATED TIMBER GRAVEL SHIELD. SEE DETAILS SHEET 22
19	6" PERFORATED PIPE
20	LIMITS OF EXCAVATION

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA 49th W.J. Holbrook CE-6265

PATH:		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION	KETCHIKAN — SOUTH TONGASS HIGHWAY COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH PROJECT NO. TE-0902(18) (71372) — ALASKA	DESIGNED BY: W. HOLBROOK / DRAWN BY: K. KLEMMETSON	PROJECT NO. 71372 / DATE: AUGUST 1995
BY:	DATE:	DESCRIPTION OF CHANGE:			

TYPICAL SECTION SUMMARY

STATION	TO	STATION	TYPICAL NO.	REMARKS
B.O.P. 109+89	TO	112+10	4	
112+10	TO	114+50	3	
114+50	TO	115+05	5	
115+05	TO	115+25	4	
115+25	TO	115+60	2	TYP. NO. 5A WATERSIDE
115+60	TO	115+90	2	TYP. NO. 1 WATERSIDE
115+90	TO	117+75	2	TYP. NO. 6 WATERSIDE
117+75	TO	118+25	2	TYP. NO. 1 WATERSIDE
118+25	TO	118+75	1	
118+75	TO	121+25	2	TYP. NO. 5A WATERSIDE
121+25	TO	121+75	2	TYP. NO. 6 WATERSIDE
121+75	TO	122+25	2	TYP. NO. 1 WATERSIDE
122+25	TO	122+45	2	*TYP. NO. 3 WATERSIDE
122+45	TO	122+85	2	TYP. NO. 1 WATERSIDE
122+85	TO	124+25	1	
124+25	TO	125+00	5A	
125+00	TO	127+75	2	TYP. NO. 5A WATERSIDE
127+75	TO	128+60	2	TYP. NO. 1 WATERSIDE
128+60	TO	128+80	2	TYP. NO. 7 WATERSIDE
128+80	TO	131+20	4	
131+20	TO	131+55	6	
131+70	TO	132+00	6	
132+00	TO	132+60	4	
132+60	TO	133+25	6	
133+25	TO	133+60	7	
133+60	TO	134+35	6	
134+35	TO	134+55	3	
134+55	TO	135+25	6	
135+25	TO	138+10	1	
138+10	TO	138+40	6	
138+40	TO	138+60	7	
138+60	TO	139+15	1	
139+15	TO	139+45	3	
139+45	TO	140+05	1	
140+05	TO	140+20	2	TYP. NO. 7 WATERSIDE
140+20	TO	141+75	2	TYP. NO. 6 WATERSIDE
141+75	TO	142+25	2	TYP. NO. 5A WATERSIDE
142+25	TO	144+40	2	TYP. NO. 6 WATERSIDE
144+40	TO	144+75	2	TYP. NO. 1 WATERSIDE
144+75	TO	146+70	1	
146+70	TO	150+10	3	
150+10	TO	150+75	6	
150+75	TO	152+25	1	
152+25	TO	152+50	6	
152+50	TO	153+10	7	
153+10	TO	153+20	6	
153+25	TO	154+50	4	
154+50	TO	155+70	5	
155+70	TO	156+10	4	
156+10	TO	157+05	5	
157+05	TO	158+40	4	
158+40	TO	158+80	6	
158+80	TO	159+45	4	
159+45	TO	159+70	2	TYP. NO. 5 WATERSIDE
159+70	TO	160+35	2	TYP. NO. 7 WATERSIDE
160+35	TO	161+40	2	TYP. NO. 6 WATERSIDE
161+40	TO	161+75	2	TYP. NO. 1 WATERSIDE
				* SEE GENERAL NOTE 3
161+75	TO	164+40	4	
164+40	TO	165+60	7	
165+60	TO	166+25	6	
166+25	TO	168+50	1	
168+50	TO	169+55	2	TYP. NO. 1 WATERSIDE
169+55	TO	170+60	2	TYP. NO. 6 WATERSIDE
170+60	TO	170+80	2	TYP. NO. 7 WATERSIDE
170+80	TO	171+00	2	TYP. NO. 6 WATERSIDE
171+00	TO	171+30	6	
171+30	TO	174+15	1	
174+15	TO	175+45	3	
175+45	TO	177+15	1	
177+15	TO	177+25	6	
177+25	TO	178+70	7	
178+70	TO	178+90	6	
178+90	TO	E.O.P. 179+75	4	

Note: See Plan & Profile Sheets for Sections Used. Pgs 6-19

See Pg 20 – Rockery Wall Summary/Welded Wire Wall Summary
Pg 21 – Structure (Conc. Panels) Summary
Pg 22 – Soldier Post Wall Summary

GENERAL NOTES:

1. TYPICAL SECTIONS AND TRANSITIONS MAY BE MODIFIED BY THE ENGINEER TO MATCH FIELD CONDITIONS.
2. CONTRACTORS SUBSTITUTION OF MATERIALS, EQUIPMENT, OR DESIGNS ARE PERMISSIBLE SUBJECT TO ENGINEER REVIEW AND APPROVAL.
3. SEE SHEET 29 FOR SPECIAL DETAIL REQUIRED FOR THIS ONE LOCATION.
4. TOTAL DOES NOT INCLUDE TREATED TIMBER REQUIRED TO CONSTRUCT SOLDIER POST WALL (TYPICAL NO. 2, SHT 2) OR GLULAM PANEL STRUCTURE (TYPICAL NO. 3, SHT. 2). SEE SHEETS 21 & 22 FOR SEPARATE BREAKDOWN SUMMARIES. STRUCTURE ALTERNATE QUANTITIES (SHEETS 36 & 37) ARE ALSO SEPARATE.

PROJECT TREATED TIMBER SUMMARY – ITEM 506

DESCRIPTION	LOCATION	QUANTITY (MBM)	REMARKS
RUB RAIL	EXIST. GUARDRAIL	8.33	SEE SHT. 29 SUMMARY
APPROACH STRUCTURE	STA. 132+25	2.60	SEE SHT. 26 SUMMARY
GRAVEL SHIELD	TYP. NO. 2	4.38	SEE SHT. 22 SUMMARY
TIMBER RAMP	STA. 131+50	0.30	
TIMBER RAMP	STA. 133+00	1.10	SEE SHT. 27 SUMMARY
* TIMBER RAMP	STA. 153+15	0.40	
TIMBER STAIRS	STA. 168+70	1.00	
* Constructed landing/Railhead for Downhill Precast Steel Ramp (see Pg 30)			
* SEE GENERAL NOTE 4	* TOTAL =	18.1	

REMOVAL OF STRUCTURES AND OBSTRUCTIONS SUMMARY

STATION	DESCRIPTION	ACTION
109+89 TO 112+05	NEW CURB & GUTTER	REMOVE/DISPOSE PAVEMENT AFTER SAWCUT
112+20	CUTOFF POWER POLE	REMOVE/DISPOSE
114+90	POWER POLE	TEMPORARY SUPPORT FOR PP AFTER EMBANKMENT REMOVED.
121+35	CUTOFF POWER POLE	REMOVE/DISPOSE
121+35	BROKEN POST	REMOVE/DISPOSE
131+13	WOOD POST	REMOVE/DISPOSE
131+25 TO 132+50	PAVE AREA BETWEEN EXISTING ROAD & RECPATH	REMOVE/DISPOSE PAVEMENT AFTER SAWCUT
132+25	TIMBER APPROACH RAMP	REMOVE/DISPOSE PER SHEET 26
133+00	WOOD RAMP	REMOVE/DISPOSE PER SHEET 27
152+50 TO 154+50 158+15 TO 159+60 162+00 TO 164+50	PAVE AREA BETWEEN EXISTING ROAD & RECPATH	REMOVE/DISPOSE PAVEMENT AFTER SAWCUT
156+40	POWER POLE	PERMANENT SUPPORT FOR PP AFTER ROCK BACKSLOPE REMOVED.
165+40	TIMBER LANDING	REMOVE/DISPOSE
174+25	CUTOFF POWER POLE	REMOVE/DISPOSE
178+40	TIMBER STAIRS	REMOVE/DISPOSE

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
49th
W.J. Holbrook
CE-6265

PATH: P:\KTN\71372\DR\-SUM1 PLOT: PCP(1) OR PLOT.PCP(2)

BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

KETCHIKAN
SOUTH TONGASS HIGHWAY
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372
ALASKA

TYPICAL SECTION SUMMARY

DESIGNED BY: W. HOLBROOK
DRAWN BY: R. ADAMS
PROJECT NO. 71372
DATE: AUGUST 1995

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	6	7	8	9	10	11	12	13	14	15	16	17	18	19	TOTAL
			SHEET NUMBERS														
120(1)	DBE ADJUSTMENT	C.S.															
201(3B)	CLEARING & GRUBBING	L.S.				(APPROXIMATE QUANTITY = 2.8 ACRES)											ALL REQ'D
202(1)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L.S.															ALL REQ'D
202(12)	SAWCUTS	L.F.	215				125				200	145	250			125	1,935 1,060
203(3)	UNCLASSIFIED EXCAVATION	C.Y.	10	50	100	150	250	100	200	25	200	100	200	200	180	60	LS (60.3) ~~1,825~~
203(6D)	BORROW, TYPE "D"	TON	130	280	270	265	400	255	250	130	395	500	360	635	265	305	4,999.6 ~~4,440~~
203(6E)	BORROW, TYPE "E"	TON		115	45	25	290	160	375	45	235	–	215	270	340	225	2,607.22 ~~2,340~~
301(1)	CRUSHED AGGREGATE BASE COURSE	TON	70	155	160	170	200	155	150	100	130	160	190	180	170	125	3,182.54 ~~2,115~~
304(4)	SUBBASE, GRADING "B"	L.S.				(APPROXIMATE QUANTITY = 200 TONS)											ALL REQ'D
401(1)	ASPHALT CONCRETE, TYPE II, CLASS "B"	TON	25	55	55	50	65	50	45	30	50	85	60	60	50	35	960.11 ~~715~~
401(2)	PBA-2 ASPHALT CEMENT	TON	1.5	3.3	3.3	3.0	3.9	3.0	2.7	1.8	3.0	5.1	3.6	3.6	3.0	2.1	53.57 ~~42.9~~
506(1)	TREATED TIMBER	L.S.				(APPROXIMATE QUANTITY = 18.1 MBM)											ALL REQ'D
509(1)	SOLDIER POST WALL	L.F.	–	300	410	380	–	–	395	75	–	–	230	50	200	–	1,964.8 ~~2,040~~
510(1)	GLULAM PANEL STRUCTURE (ALT.#1)	L.F.	190	50	20	–	–	20	30	230	110	–	–	–	–	130	~~780~~
510(2)	CONCRETE PANEL STRUCTURE (ALT.#2)	L.F.	190	50	20	–	–	20	30	230	110	–	–	–	–	130	780
510(3)	SAWN TIMBER STRUCTURE (ALT#3)	L.F.	190	50	20	–	–	20	30	230	110	–	–	–	–	130	~~780~~
511(1)	GEOWALL	SQ.F.	–	270	100	60	550	465	890	100	520	160	510	590	670	525	6,962.7 ~~5,410~~
512(1)	ROCKERY WALL	SQ.F.	–	–	–	60	220	50	20	–	270	–	325	420	70	435	2,504.1 ~~1,870~~
603(1-12)	12 INCH CORRUGATED STEEL PIPE	L.F.					5				25	50					42 ~~80~~
603(1-18)	18 INCH CORRUGATED STEEL PIPE	L.F.			10			5	20		10		15	5	20	10	96 ~~95~~
603(1-24)	24 INCH CORRUGATED STEEL PIPE	L.F.					10										120 ~~10~~
604(8)	SLOTTED DRAIN	L.F.										25					17.4 ~~25~~
606(1)	W-BEAM GUARDRAIL	L.F.	6.25	18.75	18.75	37.5	6.25				43.75		43.75	6.25		18.75	218.75 ~~200~~
606(8)	ECCENTRIC LOADER END ANCHORAGES	EACH	1	2	1	2	1				1	–	2	1	–	1	12
607(3)	CHAINLINK FENCE	L.F.	200	295	230	60	210	275	430	290	265	40	180	175	185	330	[illegible] ~~3,165~~
609(2)	CURB & GUTTER, TYPE 1	L.F.	215														
611(1)	RIPRAP, CLASS I	C.Y.			10	5	10	5	10	–	5	5	5				
615(1)	STANDARD SIGNS	SQ.F.	4	4	–	10	5	3	14.5	15	–	–	6				
615(2)	REMOVE AND RELOCATE EXISTING SIGNS	EACH	1	1	1	–	–	–	1	–	2	1	–				
618(5)	SEEDING	L.S.				(APPROXIMATE QUANTITY = 2.1 ACRES)											
629(1)	TURNOUT FURNITURE	L.S.			(APPROXIMATE QUANTITY = 6 BENCHES COMPLETE)												
633(1)	GEOTEXTILE, SEDIMENT CONTROL	L.F.	–	400	500	400	260	500	500	500	370	120	180	45			
640(1)	MOBILIZATION AND DEMOBILIZATION	L.S.															
641(1)	TEMPORARY EROSION & POLLUTION CONTROL-ADMINISTRATION	L.S.															
641(2)	TEMPORARY EROSION & POLLUTION CONTROL	L.S															
641(3)	TEMPORARY EROSION & POLLUTION CONTROL-MANPOWER	MAN-HR															
642(1)	CONSTRUCTION SURVEYING	L.S.															
643(2)	TRAFFIC MAINTENANCE	L.S.															
643(3)	PERMANENT CONSTRUCTION SIGNING	L.S.															
643(4)	CONSTRUCTION SIGN	EA./DAY	60	70	70	70	70	70	75	75	75	75	75	75			
643(7)	TRAFFIC CONE	EA./DAY	162	189	189	189	189	189	203	203	203	203	203	[illegible]			
643(8)	DRUM	EA./DAY	36	42	42	42	42	42	45	45	45	45	45	[illegible]			
643(15)	FLAGGING	HOUR	108	126	126	126	126	126	135	135	135	135	135	[illegible]			
670(1)	PAINTED TRAFFIC MARKINGS	L.S.															

* INCLUDES 7 SF @ STA 181+25 AND 7 SF @ S

BASIS OF ESTIMATE

ITEM NO.	ESTIMATE FACTOR
203(6D)	1.85 TON PER CUBIC YARD
203(6E)	1.90 TON PER CUBIC YARD
301(1)	1.96 TON PER CUBIC YARD
304(4)	1.90 TON PER CUBIC YARD
401(1)	116 LBS. PER SQ. YARD PER INCH DEPTH
401(2)	6% OF ITEM 401(1) TYPE II

PARKING AREA/APPROACH SUMMARY

STATION	LENGTH	+ WIDTH	REMARKS
115+15	25'	16'	APPROACH-GRADE & PAVE WITH ASPHALT
131+60	17'	8'	APPROACH-MATCH EXISTING ASPHALT GRADE
132+25	40'	30'	APPROACH-SEE DETAILS SHT NO 26.
153+30	17'	5'	APPROACH-MATCH EXISTING ASPHALT GRADE
153+50	30'	5' TO 9'	PARKING AREA-GRADE & PAVE WITH ASPHALT
153+85	20'	22' TO 28'	APPROACH-GRADE & PAVE WITH ASPHALT
154+15	30'	28'	APPROACH-GRADE & PAVE WITH ASPHALT
156+00	20'	20'	APPROACH-GRADE & PAVE WITH ASPHALT
158+15	40'	25'	APPROACH-GRADE & PAVE WITH ASPHALT
159+25	30'	5'	APPROACH-GRADE & PAVE WITH ASPHALT
162+00	20'	20'	APPROACH-GRADE & PAVE WITH ASPHALT
			PARKING AREA-GRADE & PAVE WITH ASPHALT

…URED FROM THE LEFT EDGE OF REC. PATH
…XISTING PAVEMENT EDGE (IN SAWCUT AREAS)

…XCAVATION SUMMARY

QUANTITY	REMARKS
0	
760	SEE SHEET NO.2 TYPICALS
30	AND SPECIAL PROVISIONS
105	SECTION 203
95	PREDOMINATELY ROCK
65	PREDOMINATELY ROCK
495	
175	Uncl. X Lump Sum as Per
~~1725 C.Y.*~~	Change Order No. 3

GUARDRAIL END ANCHORAGE SUMMARY

STATION	TO	STATION	EXISTING OFFSET FROM FOGLINE TO FACE GUARDRAIL AT END TERMINAL	NEW OFFSET FROM FOGLINE TO FACE GUARDRAIL AT END TERMINAL	REMARKS
112+06 ±	TO	112+37.25	7.5' ±	4.5'	REMOVE/DISPOSE 31.25' GR, INSTALL 6.25' NEW GR
114+51.75	TO	114+83 ±	4.5' ±	4.5'	REMOVE/DISPOSE 31.25' GR, INSTALL 6.25' NEW GR
115+67 ±	TO	116+04.5	7.3' ±	5.0'	REMOVE/DISPOSE 37.5' GR, INSTALL 12.5' NEW GR
123+00.25	TO	123+44 ±	6.5' ±	4.5'	REMOVE/DISPOSE 43.75' GR, INSTALL 18.75' NEW GR
125+52 ±	TO	126+04	7.5' ±	4.5'	REMOVE/DISPOSE 50' GR, INSTALL ~~25'~~ NEW GR 50' New GR
128+52.5	TO	128+90 ±	7.5' ±	5.0'	REMOVE/DISPOSE 37.5' GR, INSTALL 12.5' NEW GR
132+61 ±	TO	132+81.25	6.5' ±	5.0'	REMOVE/DISPOSE 31.25' GR, INSTALL 6.25' NEW GR
150+68.25	TO	151+37 ±	7.3' ±	5.0'	REMOVE/DISPOSE 68.75' GR, INSTALL 43.75' NEW GR
159+61 ±	TO	159+92.25	5.3' ±	4.7'	REMOVE/DISPOSE 31.25' GR, INSTALL 6.25' NEW GR
161+26.50	TO	161+89 ±	7.5' ±	5.0'	REMOVE/DISPOSE 67.5' GR, INSTALL 37.5' NEW GR
164+51 ±	TO	164+76	6.5' ±	5.0'	REMOVE/DISPOSE ~~25' GR~~ 43.75 GR
177+52.25	TO	178+20 ±	6.5' ±	5.0'	REMOVE/DISPOSE 43.75' GR, INSTALL 18.75' NEW GR
					TOTAL NEW GR=193.75 LF. *
					* TOTAL NEW GUARDRAIL REQUIRED TO ELIMINATE EXISTING FLARES. DOES NOT INCLUDE THE 25' OF NEW GUARDRAIL REQUIRED FOR EACH NEW END ANCHORAGE AS DETAILED ON SHEETS 24 & 25. DOES NOT INCLUDE 6.25' AT STATION 165+50.

…S SUMMARY

STATION	PIPE DIAMETER	LENGTH	REMARKS
120+65	18"	~~10'~~	EXTEND CULVERT PIPE
131+80	12"	16' ~~5'~~	EXTEND CULVERT PIPE Existing CMP Badly Rusted - cutoff back to
133+45	24"	12' ~~10'~~	EXTEND CULVERT PIPE Solid Pipe to Match — Typical of existing CMP
138+55	18"	7' ~~5'~~	EXTEND CULVERT PIPE condition on Project
140+20	18"	8' ~~10'~~	EXTEND CULVERT PIPE
141+18	18"	20' ~~10'~~	BURIED END, UNCOVER & SPLICE CULVERT PIPE
150+48	18"	10'	BURIED END, UNCOVER & SPLICE CULVERT PIPE
154+20	~~12"~~	~~25'~~	SLOTTED DRAIN PIPE
158+40	12"	17.4' ~~25'~~	SLOTTED DRAIN PIPE
158+95	~~12"~~	~~25'~~	BURIED END, UNCOVER & SPLICE CULVERT PIPE Delete - No Pipe @ Loc.
162+00	18"	3' ~~15'~~	BURIED END, UNCOVER & SPLICE CULVERT PIPE 11'-24" for 4 pt. & Cleanout (see notes)
165+32	18"	12' ~~5'~~	DAMAGED END, REMOVE DAMAGED PIPE. SPLICE NEW PIPE, & EXTEND.
170+57	18"	10'	DAMAGED END, REMOVE DAMAGED PIPE. SPLICE NEW PIPE, & EXTEND.
173+48	18"	18' 10'	DAMAGED END, REMOVE DAMAGED PIPE. SPLICE NEW PIPE.
175+80	~~18"~~	~~10'~~	BURIED END, UNCOVER & SPLICE CULVERT PIPE Delete

NOTE:

CLASS I RIPRAP 1' THICK, 3 PIPE DIAMETERS WIDE, SHALL BE REQUIRED FOR ALL PERCHED PIPES.

PATH: P:\KTN\71372\DRW\EST1 PLOTF PCP(1) OR PLOTH PCP(2)		
BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION

KETCHIKAN — ALASKA

SOUTH TONGASS HIGHWAY
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

DESIGNED BY: W. HOLBROOK
DRAWN BY:

PROJECT NO. 71372
DATE:

ENGINEER'S SEAL
STATE OF ALASKA 49th W.J.Holbrook

"R" LINE RECPATH CONTROL SUMMARY

"R" STATION	BEARING DISTANCE	NORTHING EASTING	REMARKS
B.O.P. 109 + 89.72	S 37° 54' 25" E	7019.3597 24293.2663	
P.C. 110 + 37.69	47.97'	6981.5100 24322.7400	CURVE DATA Δ= 4° 41' 51" RT.
PT 110 + 62.29	S 33° 12' 34" E	6961.5000 24337.0400	R= 300'
PC 111 + 63.13	100.84'	6877.1300 24392.2700	CURVE DATA Δ= 2° 38' 01" LT.
PT 111 + 76.92	S 35° 50' 36" E	6865.7700 24400.0900	R= 300'
PI 112 + 38.29 BK.	61.37'	6816.0250 24436.0224	
PI 114 + 25.63	S 32° 47' 10" E	6659.7846 24539.4285	
PI 114 + 82.39	26.81' S 30° 11' 48" E	6611.3581 24569.0112	
PC 114 + 98.40	45.96'	6597.5247 24577.0613	CURVE DATA Δ= 8° 32' 43" LT.
PT 115 + 68.27	S 38° 44' 29" E	6539.9750 24616.5686	R= 468.48'
PI 116 + 18.94	50.67'	6500.4526 24648.2788	
PI 123 + 00.80	S 37° 02' 53" E	6028.3025 25138.3086	
PI 123 + 27.07	26.26' S 36° 57' 31" E	6007.3415 25154.1314	
PC 123 + 92.30	65.23'	5955.2153 25193.3525	CURVE DATA Δ= 2° 46' 56 RT.
PT 124 + 92.28	S 34° 10' 37" E	5873.8966 25251.5020	R= 2059.31'
PI 125 + 51.72	59.44' S 34° 44' 13" E	5824.7219 25284.8923	
PI 125 + 71.49	19.77' S 33° 49' 23" E	5808.4757 25296.1571	
PI 126 + 03.45	31.96'	5781.9264 25313.9458	
PI 128 + 52.97	S 29° 08' 03" E	5564.1800 25435.7736	
PC 129 + 12.88	59.31'	5512.3684 25464.6520	CURVE DATA Δ= 24° 50' 58" LT.
PT 130 + 64.08	S 53° 59' 01" E	5399.6715 25564.5643	R= 350'
PC 131 + 14.65	50.57'	5369.9326 25605.4717	CURVE DATA Δ= 07° 05' 24" RT.
PT 132 + 26.02	S 46° 53' 37" E	5299.0464 25691.2757	R= 900'
PC 132 + 41.48	15.46'	5288.4805 25702.5641	CURVE DATA Δ= 06° 58' 52" LT.
PT 132 + 59.76	S 53° 52' 28" E	5276.8340 25716.6344	R= 150'
PI 132 + 87.08	28.18'	5260.2192 25739.3977	
PI 150 + 71.42	S 46° 42' 57" E	3909.7242 26870.7507	
PI 151 + 04.34	32.92' S 45° 47' 57" E	3887.1523 26894.7167	
PC 151 + 41.31	36.97'	3861.3786 26921.2197	CURVE DATA Δ= 08° 02' 22" LT.
PT 151 + 72.88	S 53° 50' 19" E	3841.0259 26945.3199	R= 225'
PC 151 + 88.07	15.19'	3832.0623 26957.5844	CURVE DATA Δ=01° 39' 12" RT.
PT 151 + 99.62	S 52° 11' 07" E	3825.1186 26966.8031	R= 400'
PC 153 + 99.48	199.86'	3702.5818 27124.6931	CURVE DATA Δ= 02° 34' 59" RT.
PT 154 + 17.51	S 49° 36' 08" E	3691.2082 27138.6853	R= 400'
PC 154 + 44.16	26.65'	3673.9389 27158.9782	CURVE DATA Δ=05° 58' 28" LT.
PT 154 + 85.87	S 55° 34' 36" E	3648.6113 27192.0929	R= 400'
PI 155 + 14.00 BK	28.14' S 55° 34' 36" E	3632.7037 27215.3051	
PI 155 + 71.37	57.33' S 57° 01' 56" E	3600.2986 27262.5902	
PI 156 + 20.86	49.49' S 58° 00' 49" E	3573.3689 27304.1094	
PI 156 + 69.96	49.10' S 59° 33' 43" E	3547.3589 27345.7558	CURVE DATA Δ= 1° 53' 07" RT.
PC 157 + 51.85	81.90'	3505.8701 27416.3643	R= 3000'
PT 158 + 50.57	S 61° 26' 50" E	3457.2710 27502.2790	R= 3000'
PC 159 + 21.12	70.56'	3423.5476 27564.2534	CURVE DATA Δ= 5° 57' 47" LT.
PT 159 + 52.35	S 67° 24' 37" E	3410.0770 27592.4049	R= 300'
PI 159 + 87.90	35.55' S 65° 45' 49" E	3396.4210 27625.2280	
PI 160 + 22.32	34.42' S 66° 11' 38" E	3382.2910 27656.6154	

"R" STATION	BEARING DISTANCE	NORTHING EASTING	REMARKS
PI 160 + 74.57	52.25' S 67° 22' 29" E	3361.2007 27704.4197	
PI 161 + 23.09	48.53' S 66° 27' 34" E	3342.5324 27749.2117	
PI 161 + 64.91	41.81' S 64° 39' 08" E	3325.8328 27787.5439	
PC 161 + 98.41	33.50'	3311.4905 27817.8198	CURVE DATA Δ= 11° 24' 45" LT.
PT 162 + 48.20	S 76° 03' 52" E	3294.7798 27864.6413	R= 250'
PC 162 + 57.20	9.00'	3292.6128 27873.3745	CURVE DATA Δ= 4° 37' 32" RT.
PT 162 + 89.49	S 71° 26' 21" E	3283.5800 27904.3685	R= 400'
PI 163 + 23.46	33.96' S 71° 50' 26" E	3272.7679 27936.5687	
PC 163 + 70.03	46.57'	3258.2553 27980.8144	CURVE DATA Δ= 7° 37' 22" RT.
PT 163 + 99.96	S 64° 13' 04" E	3247.0638 28008.5548	R= 225'
PC 164 + 02.88	2.92'	3245.7924 28011.1869	CURVE DATA Δ= 11° 51' 00" LT.
PT 164 + 39.08 BK.	S 72° 58' 56" E	3233.5200 28045.1682	R= 175'
PI 164 + 73.12	69.29'	3225.5136 28077.4422	
PI 177 + 23.18	S 57° 07' 15" E	2365.9101 28952.9400	
PI 177 + 73.87	50.69' S 60° 42' 00" E	2338.3925 28995.5097	
PC 178 + 25.81	51.94'	2312.9738 29040.8054	CURVE DATA Δ= 18° 51' 18" LT.
PT 179 + 14.99	S 79° 33' 19" E	2282.7936 29124.3029	R= 271.01'
PC 179 + 20.60	5.61'	2281.7763 29129.8216	CURVE DATA Δ= 5° 46' 30" RT.
PT 179 + 70.56	S 73° 46' 48" E	2270.2609 29178.4122	R= 495.64'
EOP 179 + 75	4.44'	2269.0207 29182.6755	

See Change Order No 2 & Pg 10 for Line Change in this Section.

"PK" NAIL OFFSET SUMMARY

"PK" NAIL NUMBER	BEARING DISTANCE	NORTHING EASTING	"R" STATION/ OFFSET	FIELD CONTROL POINT	BEARING DISTANCE	NORTHING EASTING	"R" STATION/ OFFSET
PK #1	S 38° 09' 36" E	7038.0380 24280.9760	—	101	49.97' S 64° 46' 36" E	3408.4030 27613.2100	159+72.19 6.45' LT.
2	50.04' S 37° 19' 00" E	6998.6930 24311.8930	110+17.47 2.00' LT.	102	50.02' S 66° 23' 19" E	3387.0870 27658.4610	160+22.03 5.13' LT.
3	50.06' S 36° 10' 06" E	6958.8810 24342.2400	110+67.33 2.91' LT.	103	49.96' S 67° 15' 27" E	3367.0770 27704.2370	160+72.03 5.30' LT.
4	49.97' S 35° 24' 28" E	6918.5370 24371.7330	111+17.24 5.49' LT.	104	50.01' S 67° 58' 55" E	3347.7430 27750.3600	161+22.15 5.25' LT.
5	49.98' S 34° 01' 05" E	6877.8010 24400.6910	111+67.29 7.38' LT.	105	49.92' S 68° 25' 35" E	3329.0270 27796.6420	161+71.76 6.78' LT.
6	50.01' S 33° 09' 18" E	6836.3500 24428.6690	112+17.51 5.94' LT.	106	50.00' S 69° 51' 51" E	3310.6440 27843.1350	162+25.55 8.95' LT.
7	50.00'	6794.4940 24456.0120	112+67.20 4.51' LT.	107	49.89' S 71° 21' 09" E	3293.4690 27889.9770	162+72.91 5.14' LT.
				108	49.98' S 71° 58' 15" E	3277.4870 27937.3370	163+22.69 4.72' LT.
10	S 33° 26' 31" E	6669.1040 24538.1600	114+17.18 4.14' LT.	109	50.01' S 72° 06' 10" E	3262.0080 27984.8940	163+72.67 4.85' LT.
11	49.94' S 33° 37' 42" E	6627.4280 24565.6840	114+66.83 5.21' LT.	110	49.94' S 71° 52' 11" E	3246.6600 28032.4200	164+22.68 8.96' LT.
12	50.07' S 34° 35' 09" E	6585.7900 24593.3780	115+17.06 7.83' LT.	111	50.05' S 71° 35' 23" E	3231.0850 28079.9870	164+73.85 6.08' LT.
13	49.97' S 37° 01' 51" E	6544.6480 24621.7450	115+67.85 6.96' LT.	112	50.02'	3215.2870 28127.4490	165+23.65 5.44' LT.
14	49.94' S 39° 26' 17" E	6504.7790 24651.8220	116+17.78 5.47' LT.				
15	49.92'	6466.2270 24683.5320	116+67.90 5.61' LT.	137	S 62° 12' 59" E	2342.9650 28997.9920	177+73.47 5.19' LT.
				138	49.94' S 66° 26' 48" E	2319.6850 29042.1770	178+23.72 6.52' LT.
27	S 39° 58' 47" E	6056.0080 25120.6700	122+68.36 4.51' LT.	139	50.03' S 70° 23' 37" E	2299.6920 29088.0410	178+75.07 7.19' LT.
28	50.07' S 38° 37' 25" E	6017.6440 25152.8380	123+18.07 5.17' LT.	140	50.08' S 72° 58' 01" E	2282.8890 29135.2130	179+25.68 2.10' LT.
29	50.02' S 37° 22' 11" E	5978.5660 25184.0600	123+68.06 6.61' LT.	141	49.93'	2268.2630 29182.9540	179+75.48 0.65' RT.
30	49.98' S 35° 48' 39" E	5938.8420 25214.3980	124+17.95 7.13' LT.				
31	49.97' S 34° 15' 30" E	5898.3200 25243.6350	124+67.74 7.36' LT.				
32	50.04' S 32° 34' 26" E	5856.9640 25271.8020	125+17.69 7.28' LT.				
33	50.03' S 31° 25' 44" E	5814.8060 25298.7360	125+67.76 5.73' LT.				
34	50.06'	5772.0890 25324.8400	126+17.44 4.45' LT.				
38	S 30° 14' 50" E	5597.6620 25422.5870	128+17.27 4.56' LT.				
39	49.98' S 32° 13' 56" E	5554.4840 25447.7650	128+67.28 5.75' LT.				
40	49.99' S 35° 44' 42" E	5512.2000 25474.4260	129+17.31 8.42' LT.				
41	49.96' S 40° 23' 54" E	5471.6480 25503.6140	129+68.64 9.81' LT.				
42	50.09' S 45° 36' 53" E	5433.5020 25536.0770	130+20.40 7.91' LT.				
43	49.95' S 50° 32' 09" E	5398.5650 25571.7720	130+70.56 3.34' LT.				
44	49.93' S 52° 43' 38" E	5366.8290 25610.3200	131+20.40 0.36' LT.				
45	50.09' S 52° 47' 00" E	5336.4930 25650.1810	131+70.46 0.97' LT.				
46	49.95' S 52° 01' 53" E	5306.2810 25689.9600	132+20.15 4.40' LT.				
47	49.91' S 49° 53' 59" E	5275.5730 25729.3090	132+69.88 6.45' LT.				
48	50.06'	5243.3270 25767.6020	133+19.34 4.53' LT.				
83	S 48° 19' 27" E	3914.0450 26873.0600	150+70.26 4.76' LT.				
84	49.97' S 48° 41' 50" E	3880.8170 26910.3860	151+19.99 6.38' LT.				
85	49.86' S 49° 17' 57" E	3847.9060 26947.8440	151+70.80 7.03' LT.				
86	49.96' S 50° 07' 58" E	3815.3240 26985.7230	152+20.57 3.86' LT.				
87	50.15' S 50° 56' 25" E	3783.1780 27024.2140	152+70.68 2.07' LT.				
88	49.95' S 52° 04' 19" E	3751.7050 27062.9970	153+20.62 0.98' LT.				
89	50.01' S 53° 03' 35" E	3720.9670 27102.4420	153+70.63 0.88' LT.				
90	50.07' S 53° 52' 46" E	3690.8750 27142.4620	154+20.60 2.19' LT.				
91	50.06' S 55° 13' 42" E	3661.3650 27182.9000	154+70.88 5.05' LT.				
92	49.98' S 56° 13' 43" E	3632.8590 27223.9580	155+21.10 5.02' LT.				
93	50.05' S 57° 02' 08" E	3605.0370 27265.5630	155+71.14 5.59' LT.				
94	49.90' S 57° 54' 11" E	3577.8870 27307.4270	156+21.28 5.59' LT.				
95	49.95' S 58° 57' 57" E	3551.3440 27349.7450	156+71.38 5.45' LT.				
96	50.04' S 60° 00' 08" E	3525.5450 27392.6240	157+21.42 4.94' LT.				
97	49.96' S 61° 13' 31" E	3500.5660 27435.8930	157+71.41 5.26' LT.				
98	49.95' S 62° 01' 34" E	3476.5240 27479.6710	158+21.45 5.96' LT.				
99	49.99' S 62° 59' 59" E	3453.0770 27523.8170	158+71.49 6.61' LT.				
100	49.97' S 63° 53' 36" E	3430.3900 27568.3420	159+21.45 7.96' LT.				

GENERAL NOTES:

1. FOR EXISTING GUARDRAIL AREAS SHOWN IN PLAN & PROFILE SHEETS, CONTRACTOR SHALL USE 2'-0" OFFSET FROM FACE OF GUARDRAIL (SEAWARD) FOR ESTABLISHING HORIZONTAL CONTROL FOR LEFT EDGE OF RECREATION PATH.
2. FOR NON-GUARDRAIL AREAS, CONTINUOUS TIES TO EXISTING PK NAILS HAVE BEEN PROVIDED AND ARE SUMMARIZED ABOVE AS THEY RELATE TO RECPATH STATIONING ("R" LINE) FOR THE PURPOSE OF ESTABLISHING HORIZONTAL CONTROL TO PATH LEFT EDGE IN THESE AREAS.
3. ANY ALTERATIONS TO ALIGNMENT GIVEN SHALL BE PREAPPROVED BY THE ENGINEER.

PATH: P:\KTN\71372\DR\-SUM2 PLOTH.PCP(1) OR PLOTH.PCP(2)

STATE OF ALASKA

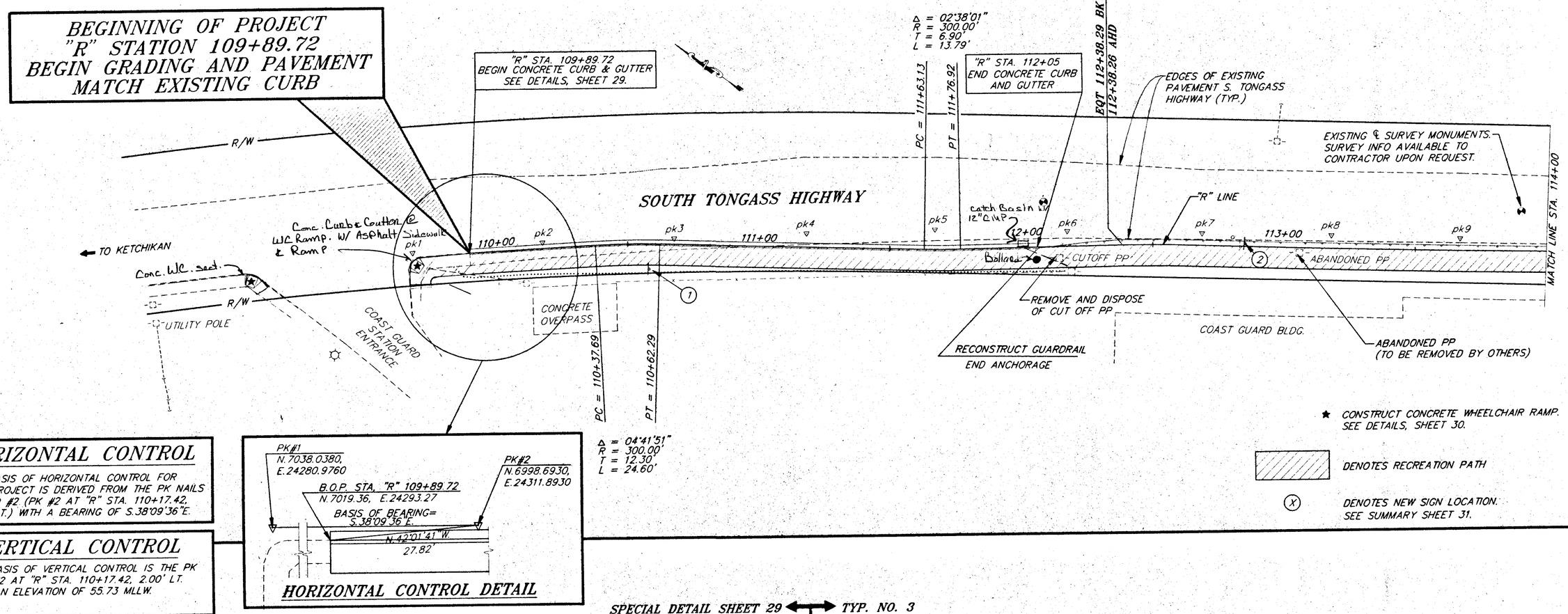
KETCHIKAN | SOUTH TONGASS HIGHWAY | COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH | ALASKA

DESIGNED BY: W. HOLBROOK

PROJECT NO. 71372

DATE:

STATE OF ALASKA 49th W.J. Holbrook



HORIZONTAL CONTROL

THE BASIS OF HORIZONTAL CONTROL FOR THIS PROJECT IS DERIVED FROM THE PK NAILS #1 AND #2 (PK #2 AT "R" STA. 110+17.42, 2.00' LT.) WITH A BEARING OF S.38°09'36"E.

VERTICAL CONTROL

THE BASIS OF VERTICAL CONTROL IS THE PK NAIL #2 AT "R" STA. 110+17.42, 2.00' LT. WITH AN ELEVATION OF 55.73 MLLW.

HORIZONTAL CONTROL DETAIL

SPECIAL DETAIL SHEET 29 ⟷ TYP. NO. 3

NOTE:
PROFILE GRADE SHALL BE CONSTRUCTED AS NEAR AS PRACTICAL TO EXISTING GRADE EXCEPT WHERE OTHERWISE NOTED IN THESE PLANS.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
49th
W. J. Holbrook
CE-6265

PATH: P:\KTN\71372\DR\-P109 PLOTF.PCP(20) OR PLOTH.PCP(40)

BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION

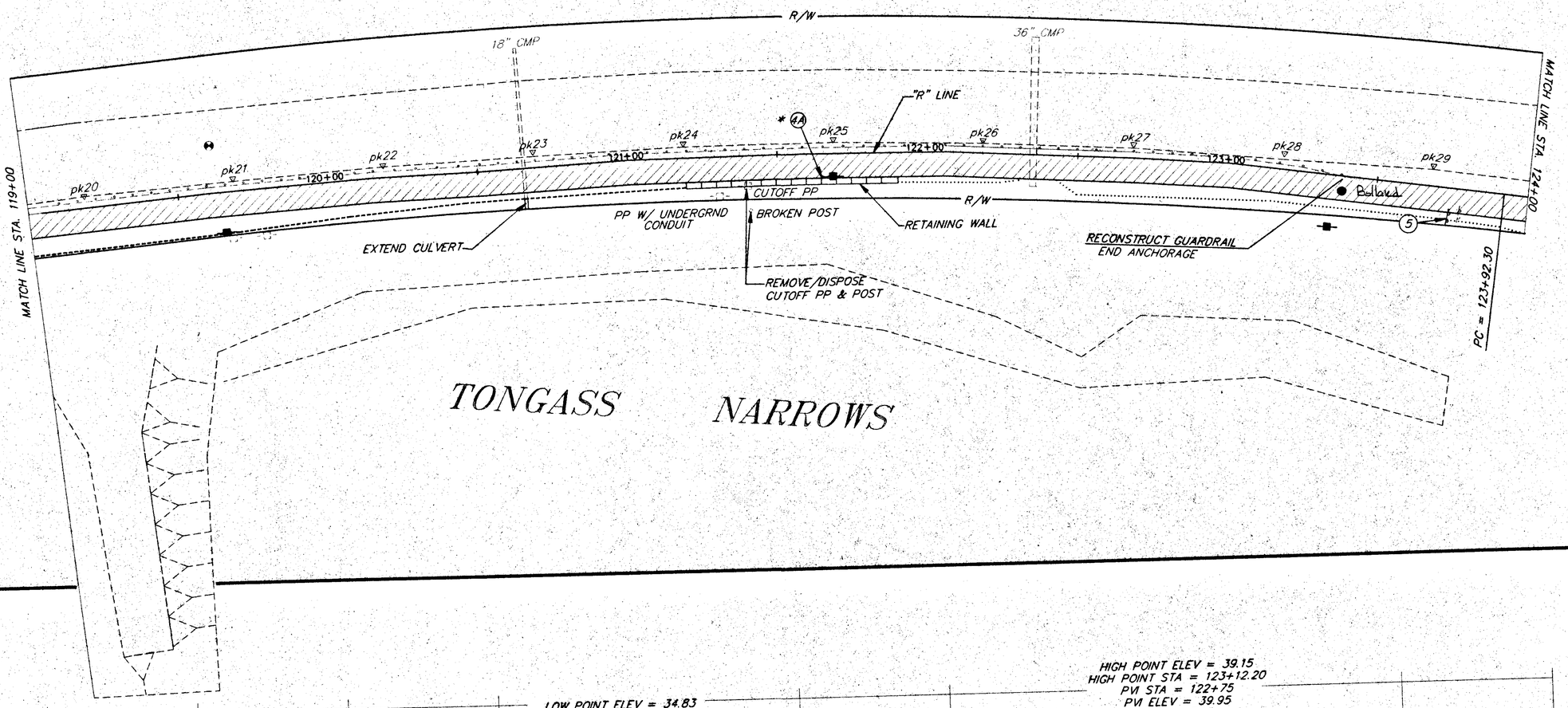
KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

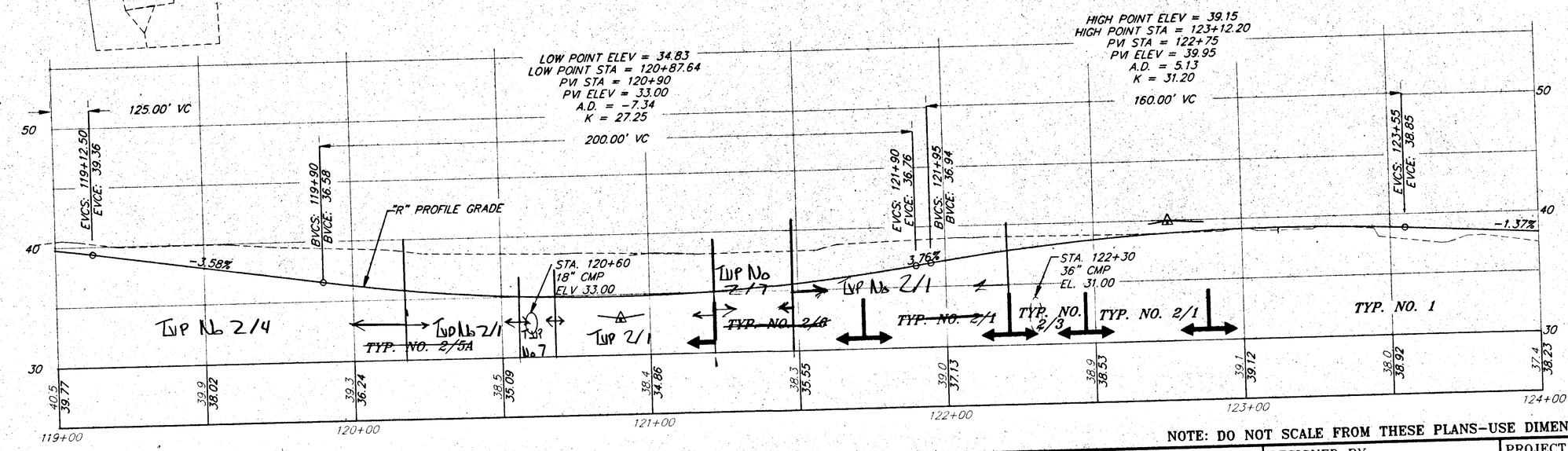
DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY: C. ANDERSON	DATE: AUGUST 1995

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH:		(PLOTF.PCF(20) OR PLOTH.PCF(40))	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION	KETCHIKAN — SOUTH TONGASS HIGHWAY COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH PROJECT NO. TE-0902 (18) 71372 — ALASKA	DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372	ENGINEER'S SEAL
BY:	DATE:	DESCRIPTION OF CHANGE:			DRAWN BY:	DATE:	

*** NOTE:**
RELOCATE SIGN (6) TO THIS LOCATION WHEN NEW POWER POLE IS INSTALLED. HERE & POWER POLE AT SIGN (6) LOCATION IS REMOVED.





NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

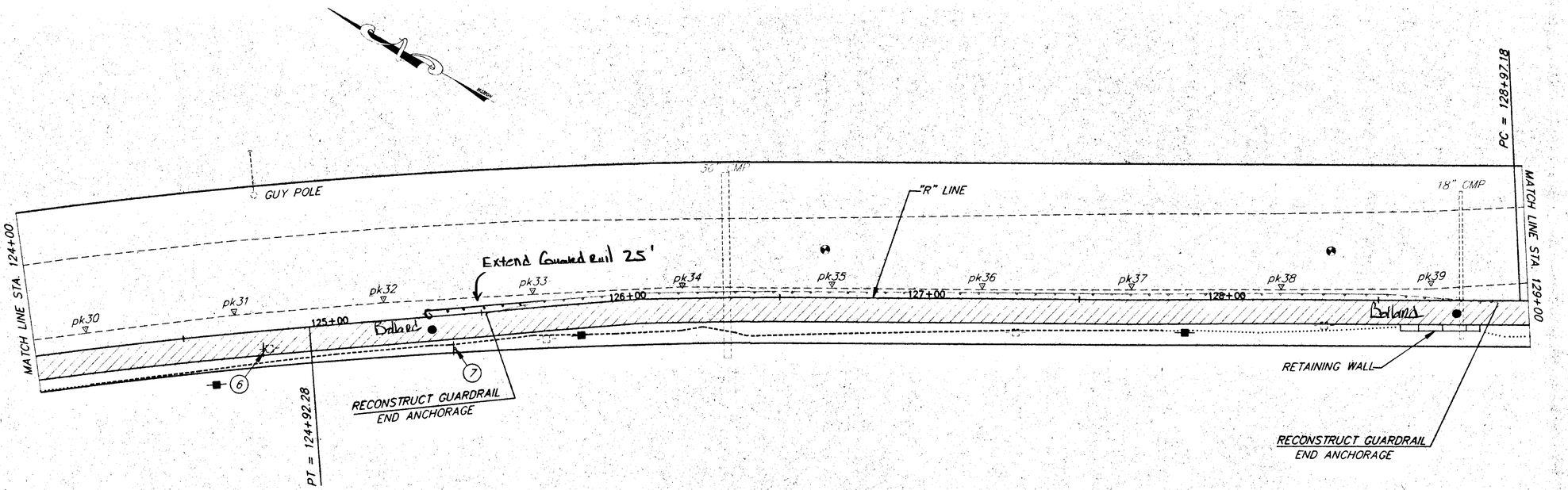
ENGINEER'S SEAL
STATE OF ALASKA
49th
W. J. Holbrook
CE 6765

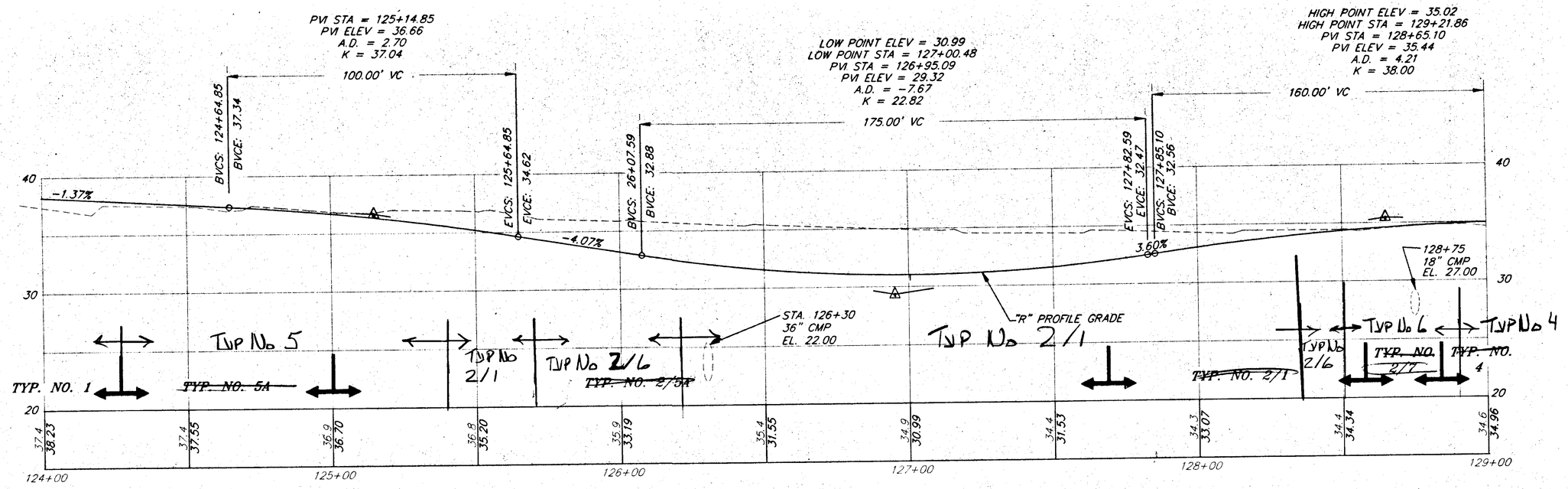
PATH: P:\KTN\71372\DR\-P119 PLOTF.PCP(20) OR PLOTH.PCP(40)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY: C. ANDERSON	DATE: AUGUST 1995
CHECKED BY: W. HOLBROOK	
APPROVED BY:	





NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
49th
W. J. Holbrook
CE-6265
REGISTERED PROFESSIONAL ENGINEER

PATH: P:\ktn\71362\DR\-P124 PLOTF.PCP(20) OR PLOTH.PCP(40)

BY:	DATE:	DESCRIPTION OF CHANGE:

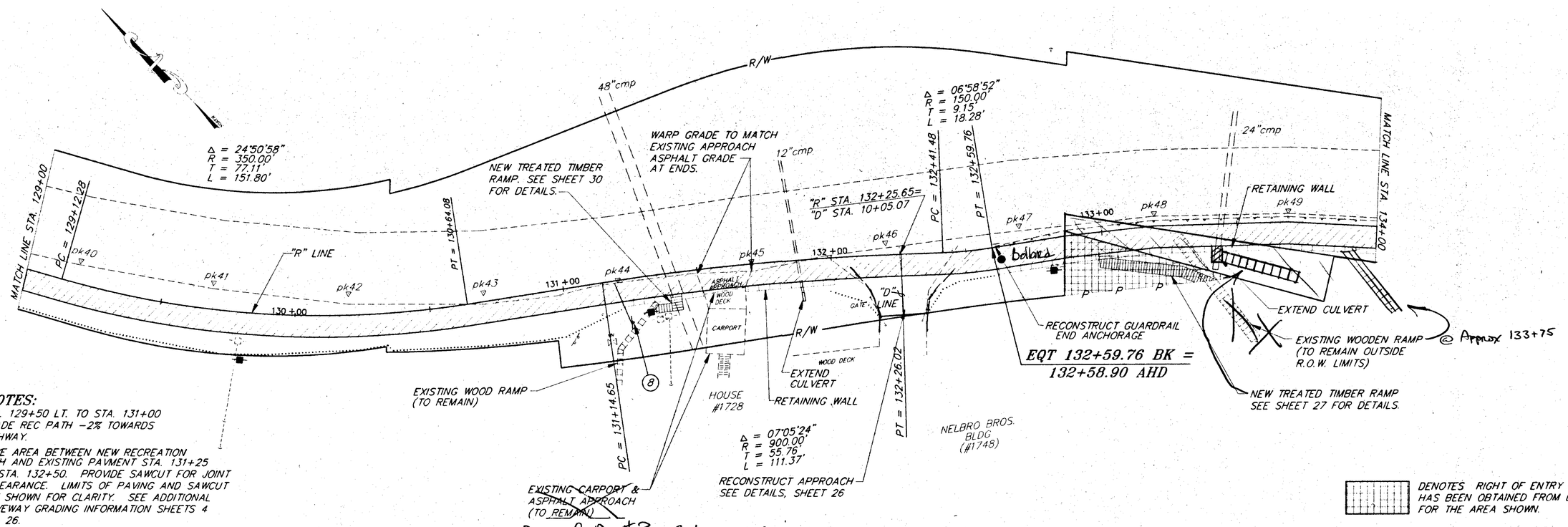
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

KETCHIKAN ALASKA
SOUTH TONGASS HIGHWAY
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

"R" STA. 124+00 TO "R" STA. 129+00

PLAN & PROFILE

DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY: C. ANDERSON	DATE: AUGUST 1995
CHECKED BY: C. MORROW	SHEET 9 OF 38 37

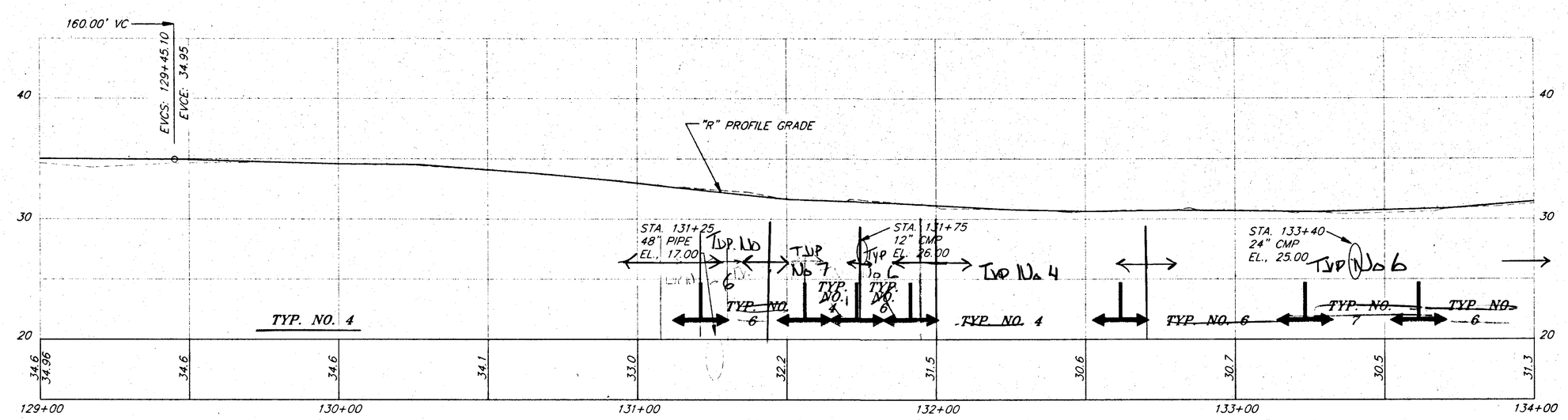


NOTES:

1. STA. 129+50 LT. TO STA. 131+00 GRADE REC PATH −2% TOWARDS HIGHWAY.
2. PAVE AREA BETWEEN NEW RECREATION PATH AND EXISTING PAVMENT STA. 131+25 TO STA. 132+50. PROVIDE SAWCUT FOR JOINT APPEARANCE. LIMITS OF PAVING AND SAWCUT NOT SHOWN FOR CLARITY. SEE ADDITIONAL DRIVEWAY GRADING INFORMATION SHEETS 4 AND 26.

DENOTES RIGHT OF ENTRY PERMISSION HAS BEEN OBTAINED FROM D.N.R FOR THE AREA SHOWN.

P = PERMIT LINE



NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

ENGINEER'S SEAL

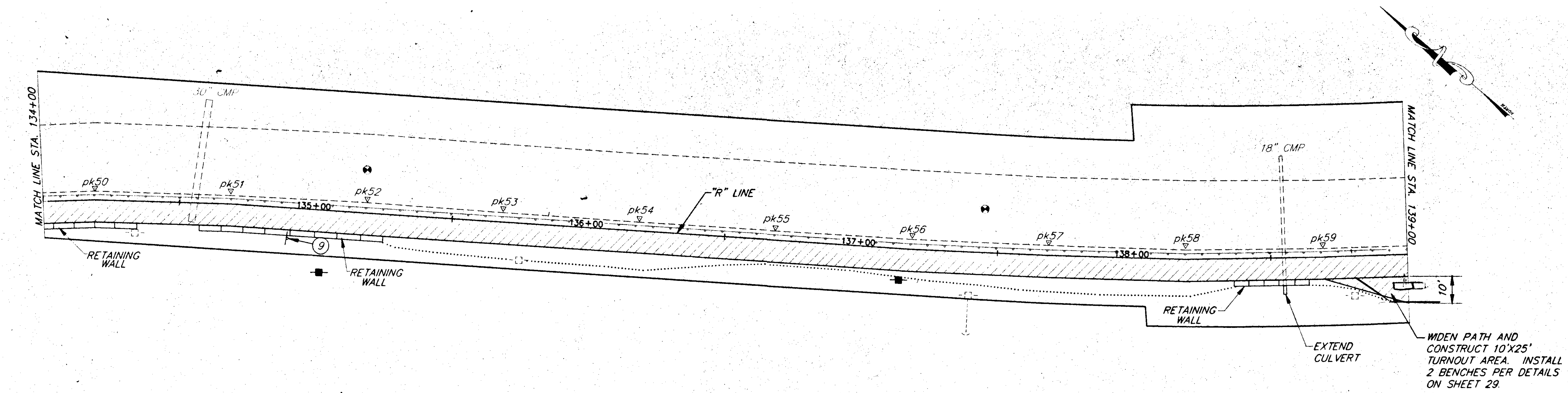
STATE OF ALASKA 49th

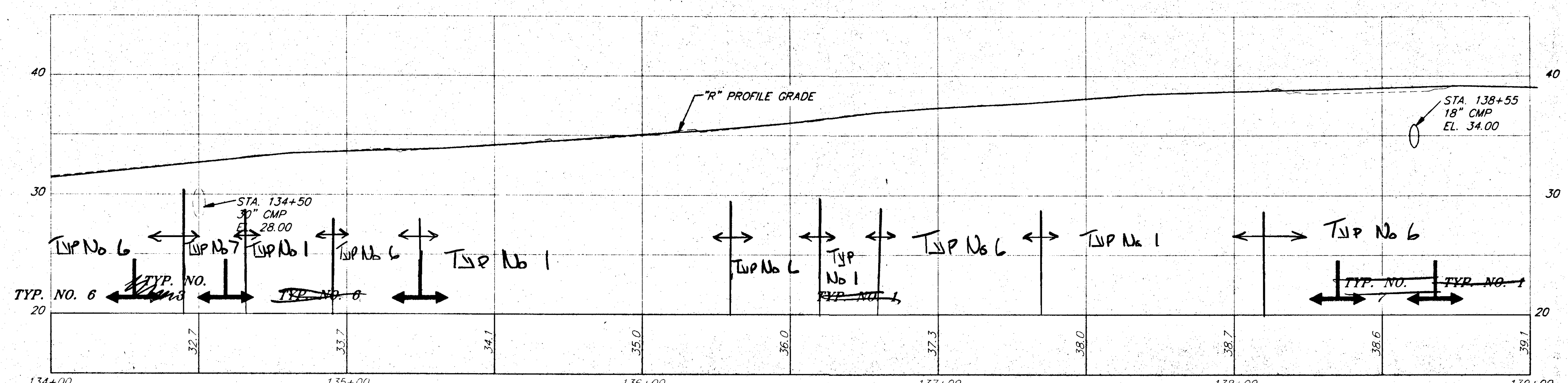
PATH: P:\KTN\71372\DR\-P129 PLOTF.PCP(20) OR PLOTH.PCP(40)		
BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION

KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

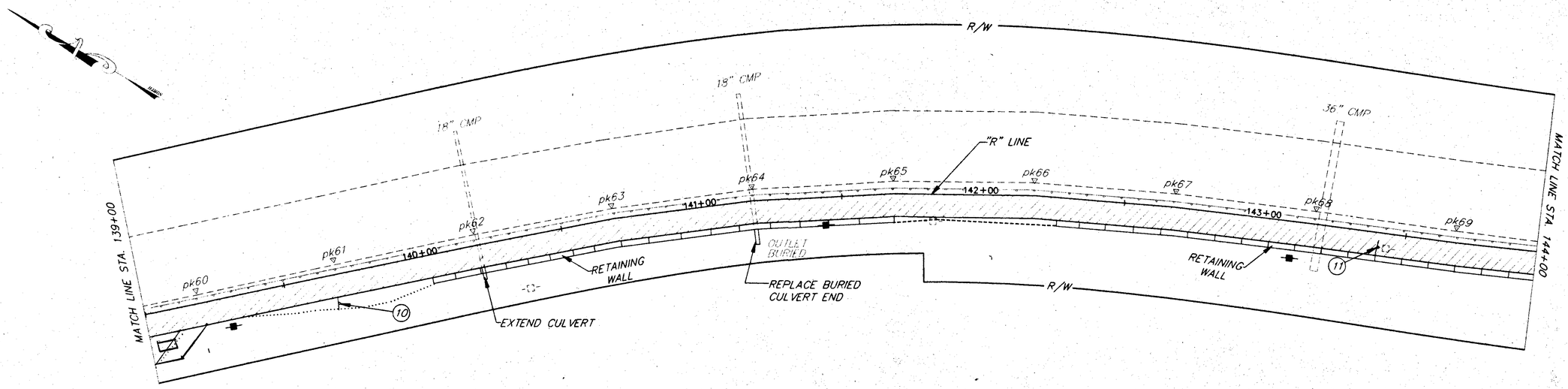
DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY:	DATE:

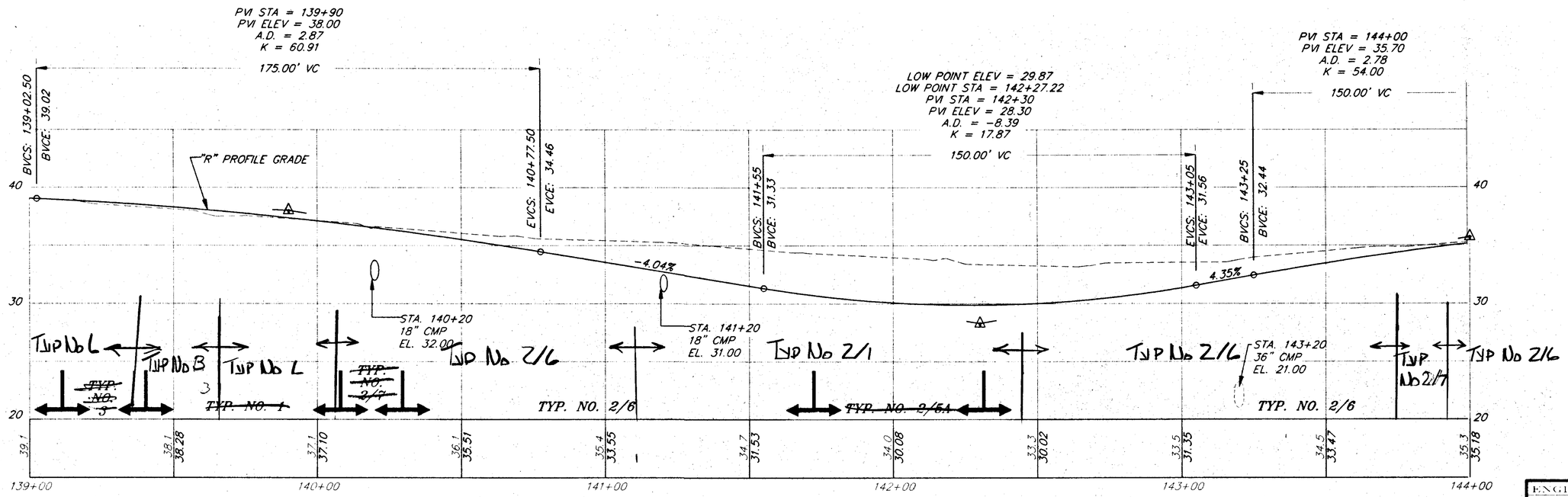




NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\KTN\71372\DR\-P134 PLOTF.PCP(20) OR PLOTH.PCP(40)		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION	KETCHIKAN SOUTH TONGASS HIGHWAY ALASKA COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH PROJECT NO. TE-0902 (18) 71372	DESIGNED BY: W. HOLBROOK DRAWN BY:	PROJECT NO. 71372 DATE:	ENGINEER'S SEAL
BY:	DATE:	DESCRIPTION OF CHANGE:				





NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\KTN\71372\DR\-P139 PLOTF.PCP(20) OR PLOTH.PCP(40)

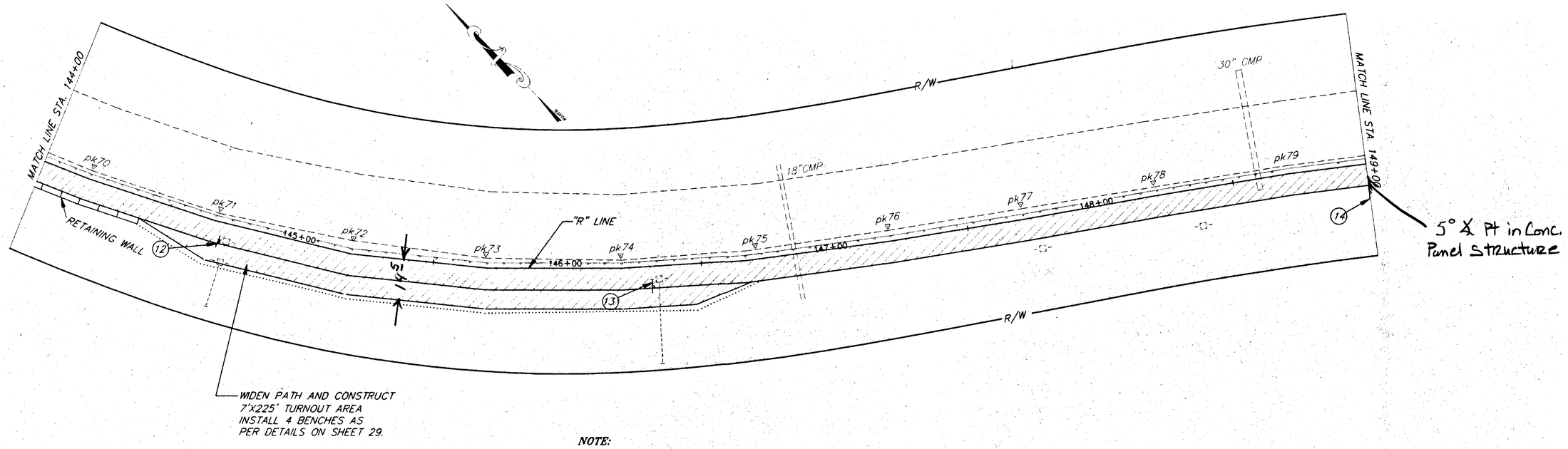
BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION

KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

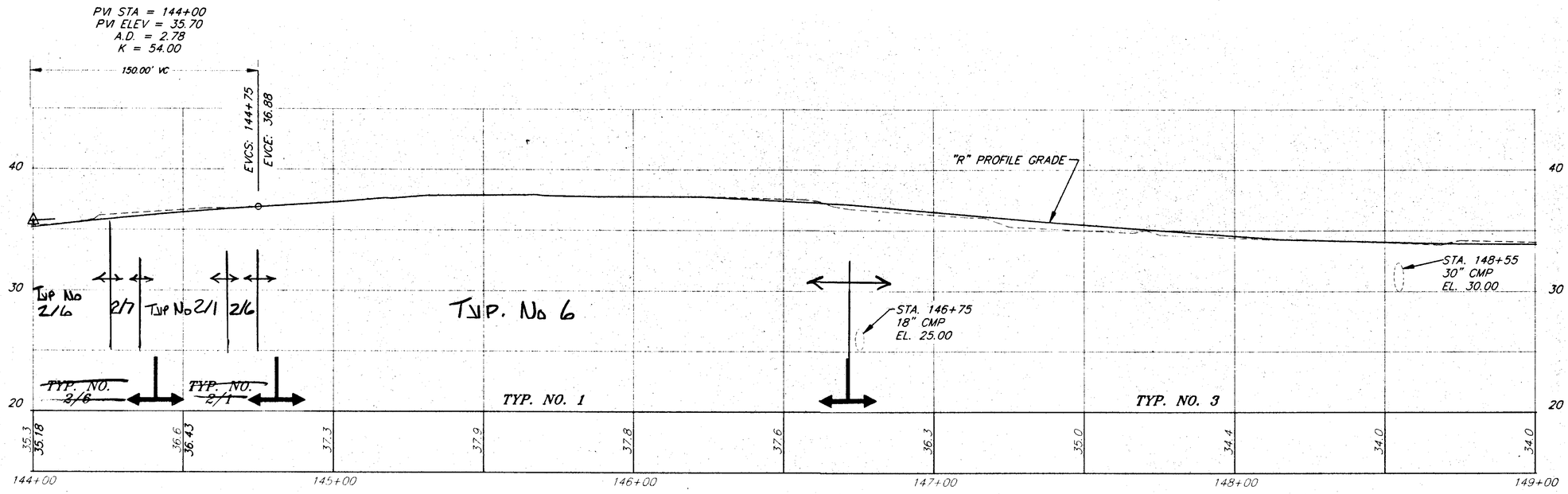
DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY:	DATE:

ENGINEER'S SEAL
STATE OF ALASKA
49th
W. J. Holbrook



NOTE:

APPLY TYPICAL NO. 1 SHEET 2 FOR TURNOUT AREAS, EXCEPT THAT 9 FOOT WIDTH DIMENSION VARIES DEPENDENT UPON AVAILABLE WIDTH (9'MIN.).



NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
49th
W.J. Holbrook

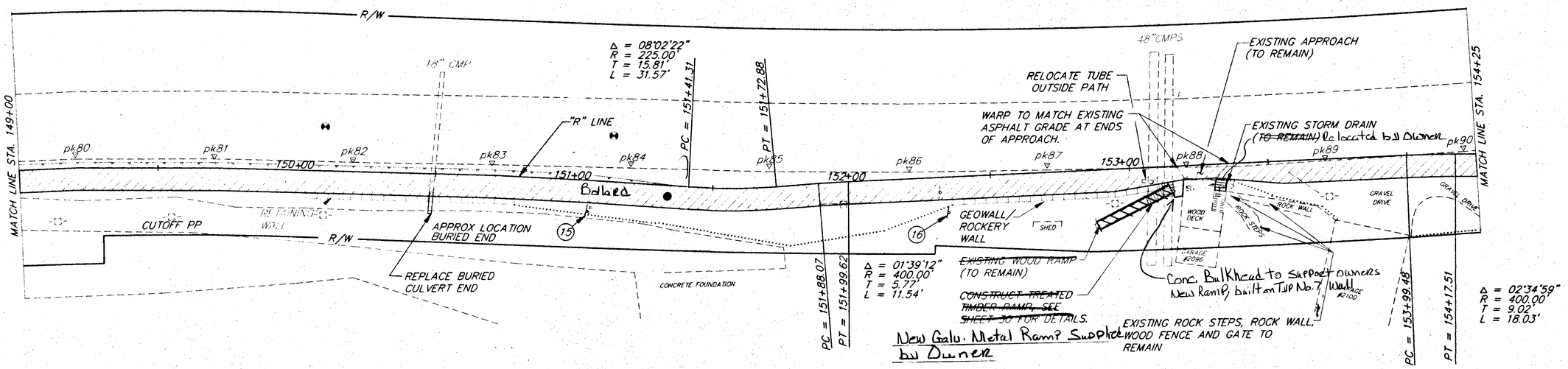
PATH: P:\KTN\71372\DR\-P144 PLOTF.PCP(20) OR PLOTH.PCP(40)		
BY:	DATE:	DESCRIPTION OF CHANGE:

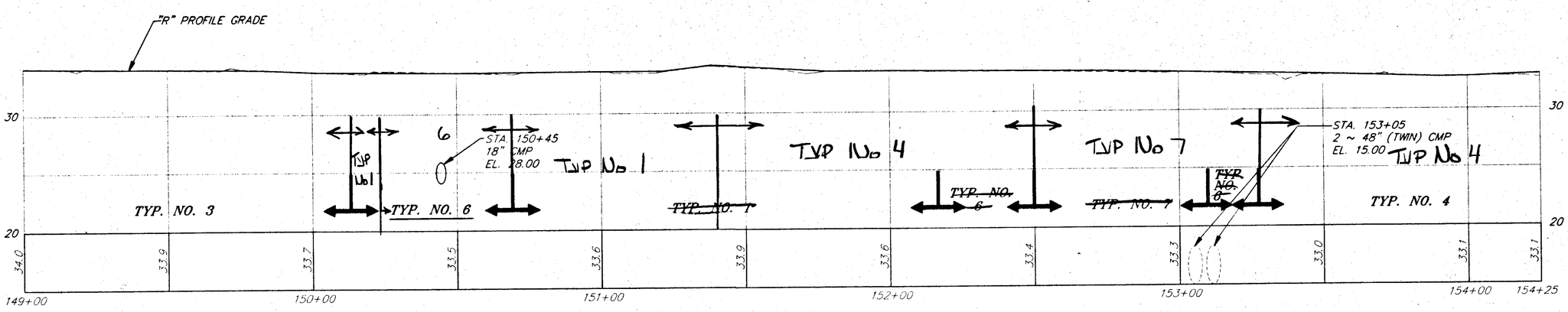
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION

KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY:	DATE:

NOTE:
PAVE AREA BETWEEN RECREATION PATH AND EXISTING PAVEMENT, STA. 152+25 TO 154+40. PROVIDE SAWCUT FOR JOINT APPEARANCE. SEE ADDITIONAL DRIVEWAY GRADING INFORMATION ON SHTS. 4 & 26. (LIMITS OF PAVING AND SAWCUT NOT SHOWN FOR CLARITY)





NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
49th
Wm. J. Holbrook
CE-6265
REGISTERED ENGINEER

PATH: P:\KTN\71372\DR\-P149 PLOTF.PCP(20) OR PLOH.PCP(40)

BY:	DATE:	DESCRIPTION OF CHANGE:

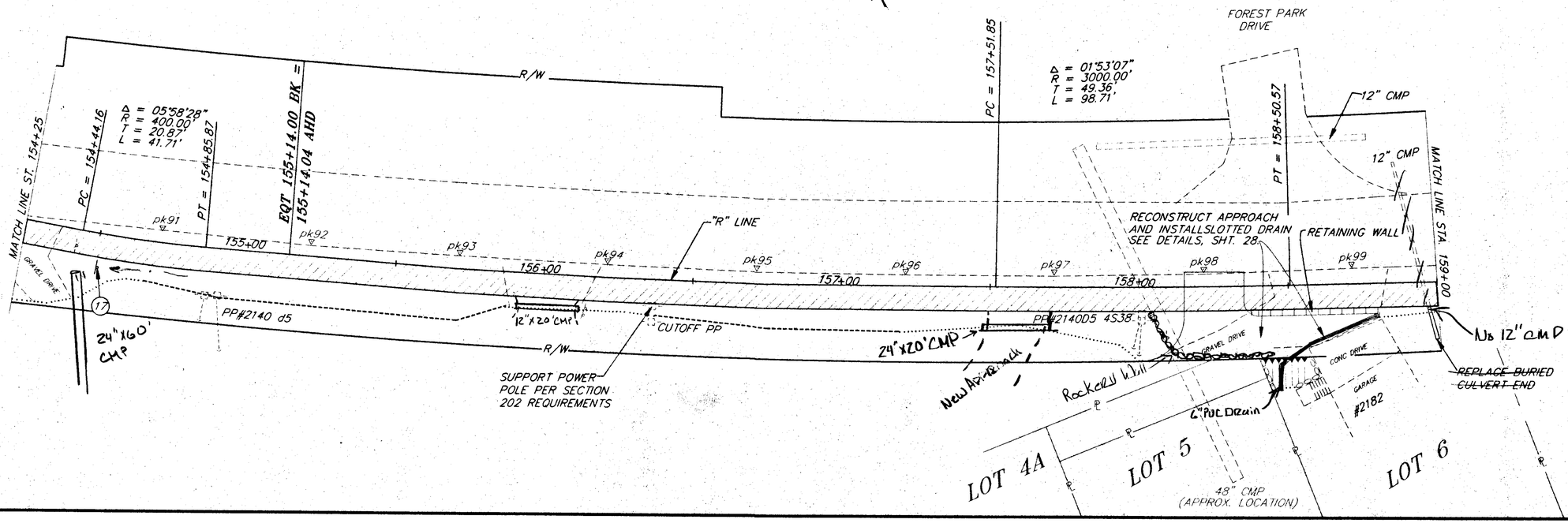
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

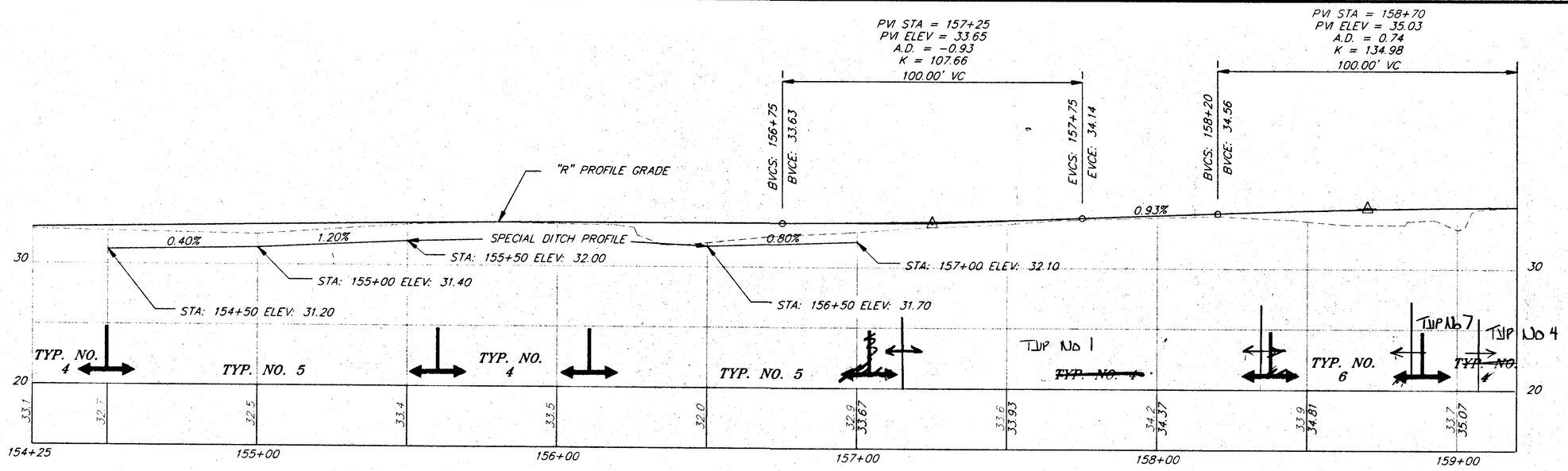
KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372
"R" STA. 149+00 TO "R" STA. 154+00

DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY: C. ANDERSON	DATE: AUGUST 1995

NOTE:

PAVE AREA BETWEEN NEW RECREATION PATH AND EDGE OF EXISTING ASPHALT STA. 158+15 TO 159+60. PROVIDE SAWCUT FOR JOINT APPEARANCE. SEE ADDITIONAL DRIVEWAY INFORMATION ON SHEETS 4 AND 26. (LIMITS OF PAVING AND SAWCUT NOT SHOWN FOR CLARITY).





NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL

STATE OF ALASKA 19th

PATH: P:\KTN\71372\DR\-P154		PLOTF.PCP(20) OR PLOTH.PCP(40)
BY:	DATE:	DESCRIPTION OF CHANGE:

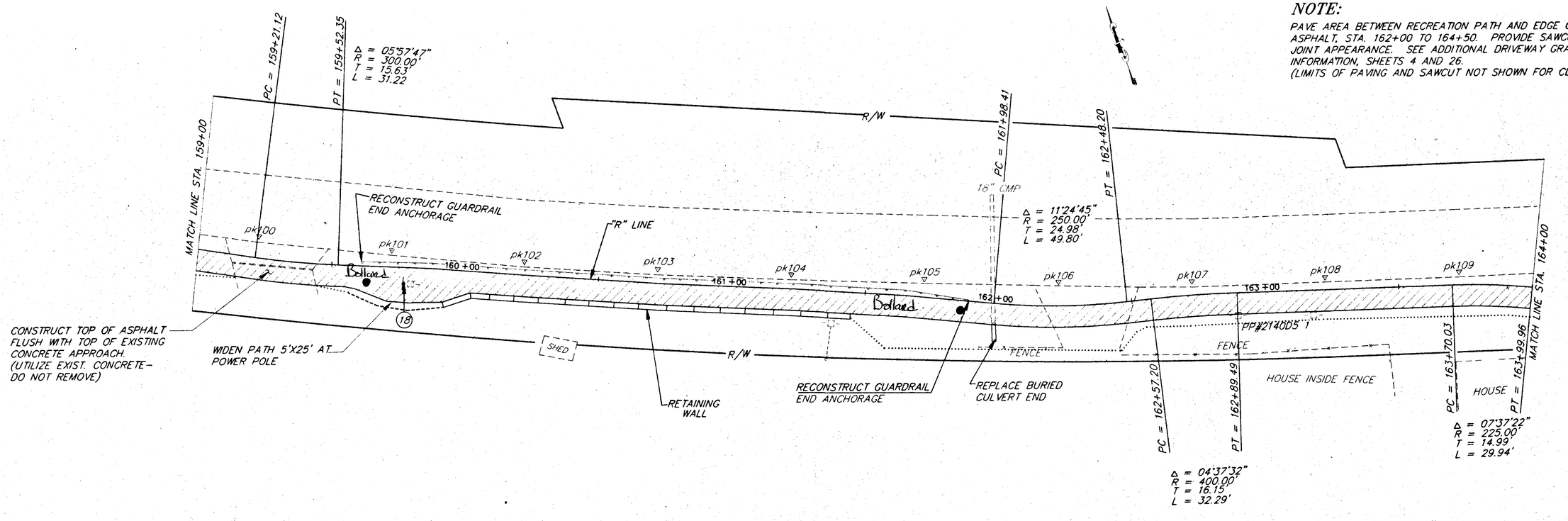
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION

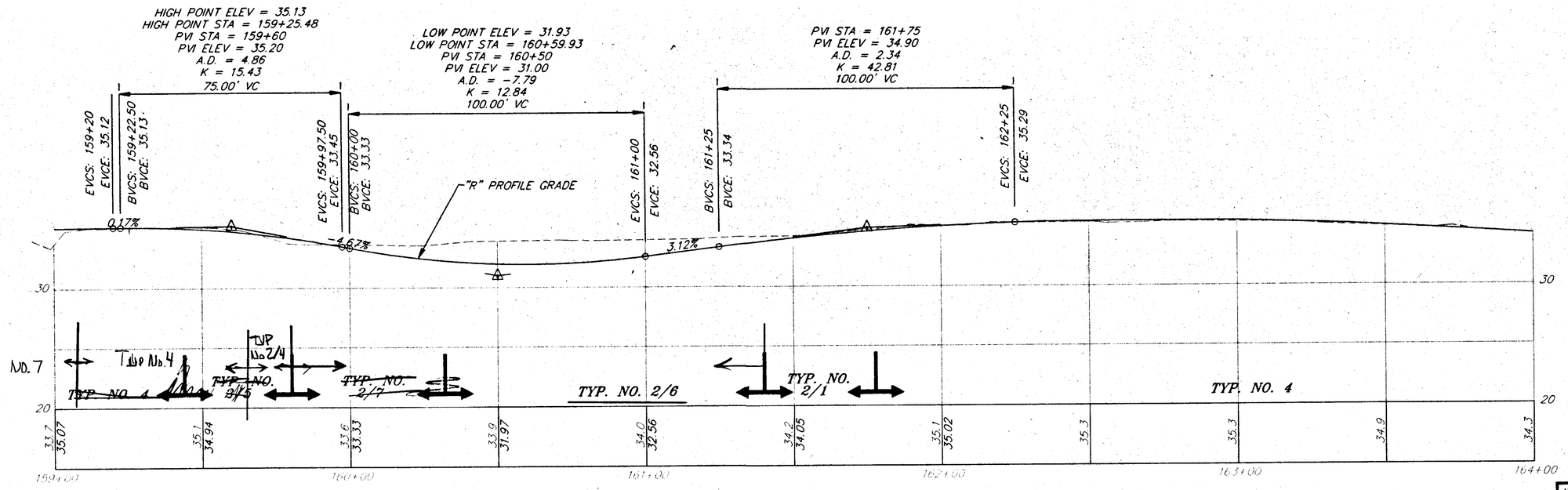
KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY:	DATE:

NOTE:

PAVE AREA BETWEEN RECREATION PATH AND EDGE OF EXISTING ASPHALT, STA. 162+00 TO 164+50. PROVIDE SAWCUT FOR JOINT APPEARANCE. SEE ADDITIONAL DRIVEWAY GRADING INFORMATION, SHEETS 4 AND 26.
(LIMITS OF PAVING AND SAWCUT NOT SHOWN FOR CLARITY.)





NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
49th
William J. Holbrook
W.J. Holbrook

PATH: P:\KTN\71372\DR\-P159 PLOTF.PCP(20) OR PLOTH.PCP(40)

BY:	DATE:	DESCRIPTION OF CHANGE:

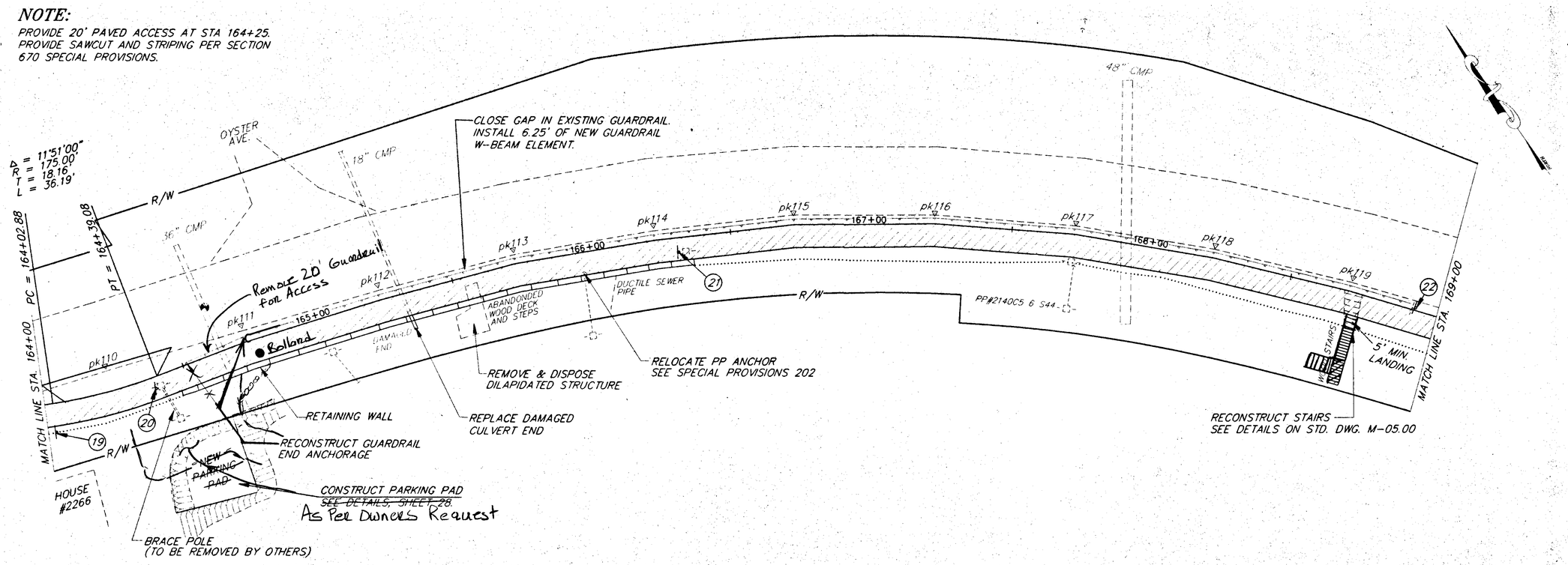
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION

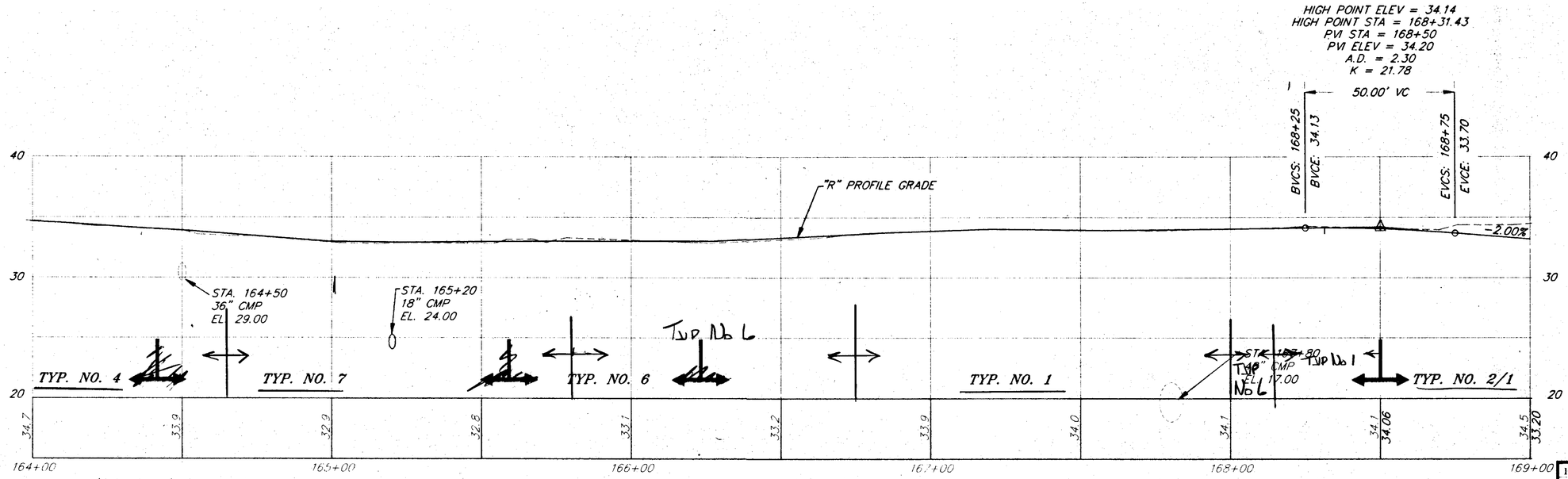
KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY:	DATE:

NOTE:

PROVIDE 20' PAVED ACCESS AT STA 164+25.
PROVIDE SAWCUT AND STRIPING PER SECTION
670 SPECIAL PROVISIONS.





NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL

STATE OF ALASKA
49th
W.J. Holbrook

PATH: P:\KTN\71372\DR\-P164 PLOTF.PCP(20) OR PLOTH.PCP(40)

BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY:	DATE: AUGUST 1995

ENGINEER'S SEAL

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P.\KTN\71372\DR\-P169   PLOTF.PCP(20) OR PLOTH.PCP(40)

BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION

KETCHIKAN   ALASKA
SOUTH TONGASS HIGHWAY
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

DESIGNED BY: W. HOLBROOK
DRAWN BY:
PROJECT NO. 71372
DATE:

MATCH LINE STA. 174+00

18" CMP

18" CMP

18" CMP

R/W

TRANSFORMER

HOUSE

PC = 178+25.81

Δ = 18°51'18"
R = 271.01'
T = 45.00'
L = 89.19'

ABANDONED GARAGE

CUTOFF PP #2140 B5 2 53

pk130

CUTOFF PP

pk131

175+00

pk132

pk133

176+00

pk134

"R" LINE

pk135

177+00

pk136

pk137

178+00

pk138

pk139

179+00

pk140

CUTOFF PP

pk141

PT = 179+70.56

Δ = 05°46'30"
R = 495.64'
T = 25.00'
L = 49.96'

PC = 179+20.60

ABANDONED WOOD STAIRS

25 REPLACE BURIED CULVERT END

26 RETAINING WALL

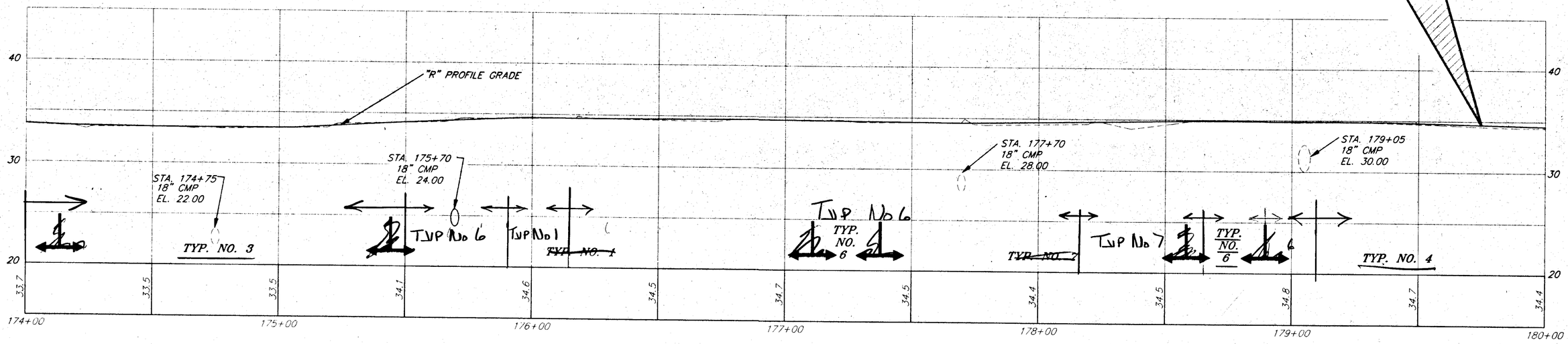
REMOVE & DISPOSE CUT OFF PP

RECONSTRUCT GUARDRAIL END ANCHORAGE

REMOVE & DISPOSE ABANDONED STAIRS (TO R/W LIMITS)

NOTE:
PAVE AREA BETWEEN RECPATH AND EXISTING PAVEMENT. PROVIDE SAWCUT FOR JOINT APPEARANCE.

END OF PROJECT
"R" STATION 179+75
END GRADING AND PAVEMENT



NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL

PATH: P:\KTN\71372\DR\-P174 PLOTF.PCP(20) OR PLOTH.PCP(40)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

KETCHIKAN

SOUTH TONGASS HIGHWAY

ALASKA

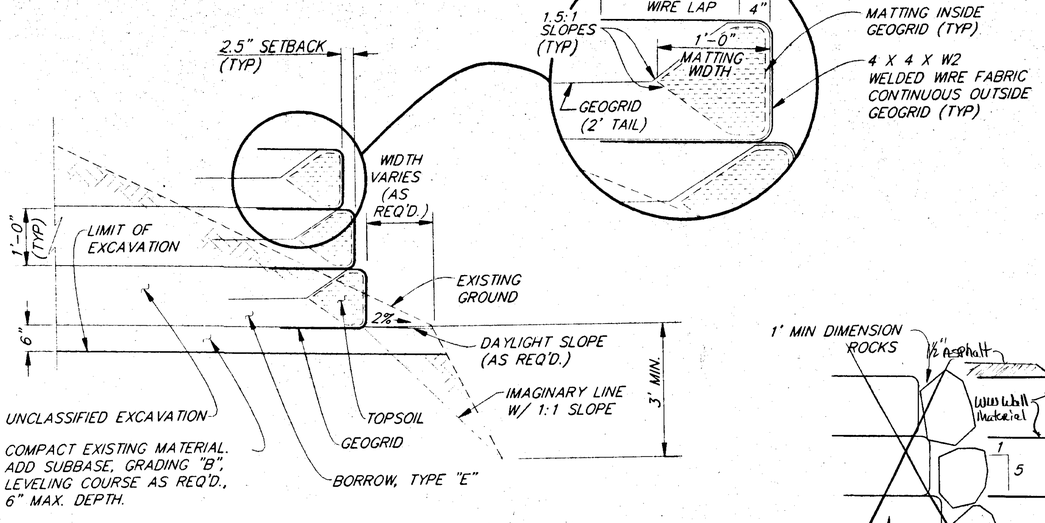
DESIGNED BY:

PROJECT NO.

Station	To Station	(LF) Length	Sq Ft Area	REMARKS
115+90	118+08	218'	317.0	
121+20	121+50	30	30.1	
125+58	126+24	66	97.0	
128+34	128+83	49	122.0	
131+20	132~	80	217.7	
132+28	132+50	22	22.6	Support for Approach Ramp
132+71	134+65	194	518.5	
134+99	135+29	30	90.3	
136+30	136+69	39	102.3	
136+80	137+33	53	158.4	
138+10	139+33	136	542.3	End sect. @ Conc. panels
139+63	141+12	149	486.1	
142+40	144+25	185	461.6	End sect. @ Conc. panels
144+66	146+70	204	666.6	
150+18	150+60	42	90.6	
152+50	153+20	95	280.3	
158+30	158+78	48	130.5	
159+81	161+40	158	399.6	
165+09	166+79	170	374.1	
168+02	168+17	15	15.1	
169+62	171+58	199	597.4	
172+18	172+83	65	223.0	
173+75	174~	36	136.2	End sect. @ Conc. panels
175+50	175+90	40	123.2	
176+08	179+08	304	760.2	
		2623	6962.7	Total 28%

REMARKS

- ST. ON TOP OF ROCKERY
- ST. ON TOP OF ROCKERY
- ST. ON TOP OF ROCKERY
- ST. ON TOP OF ROCKERY
- ST. ON TOP OF ROCKERY
- EE SHEET 28.
- ST. ON TOP OF ROCKERY
- ST. ON TOP OF ROCKERY
- ST. ON TOP OF ROCKERY
- ST. ON TOP OF ROCKERY
- E DETAIL, THIS SHT.

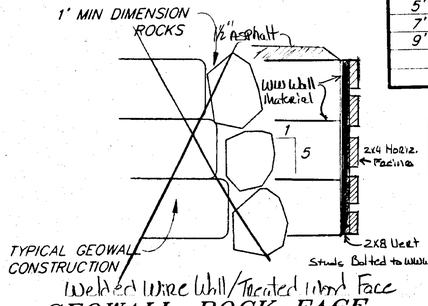


EMBANKMENT AND FACE CONSTRUCTION DETAILS

1. ROCKERY WALL PER SECTION 512 SPECIFICATIONS.
2. SEEDING OF GEOWALL FACE PER SECTION 618 SPECIFICATIONS. TOPSOIL PER SECTION 726 SPECIFICATIONS. MATTING PER SECTION 727 SPECIFICATIONS.
3. ALL WALL HEIGHTS SHOWN ARE APPROXIMATE ONLY. FIELD REVISIONS MAY BE REQUIRED.
4. CHINK ALL VOIDS IN ROCKERY WALLS (BACKFILL SIDE) GREATER THAN 6" WITH SMALLER DIAMETER ROCK.
5. PRECUT GEOGRID, MESH AND MATTING AT POST HOLE LOCATIONS, PROVIDE A SINGLE CUT OF THESE FABRICS FOR A ONE FOOT WIDTH IN A DIRECTION 90° TO RECREATION PATH AND CENTERED OVER THE POST HOLE LOCATIONS.

ROCKERY SIZE & WEIGHT REQUIREMENTS				
WALL HEIGHT (MAX) H	BASE WIDTH (MIN) X	BASE ROCK MIN. WEIGHT	TOP WIDTH Y (MIN.)	TOP ROCK MIN. WEIGHT
5'	2.75'	2000	2.25	1400
7'	3.25'	2750	2.75	2000
9'	3.75'	3500	3.00	2400

GEOGRID EMBEDMENT LENGTH TABLE		
WALL HEIGHT H	EMBED. LENGTH X	OVERLAP LENGTH Y
2	4	2
3	5	3
4	6	3



Welded Wire Wall/Faceted Wood Face

~~GEOWALL-ROCK FACE~~ DETAIL @ STA. 158+50

Rockery Wall Summary

Station	To Station	(L.F) Length	(Sq Ft) Area	
120+56	120+68	12	36.0	
121+24	121+48	24	23.7	
131+20	131+44	24/33	124.8/219.5	Upper & lower wall for Carport & Path
131+25	132+50	42	102.1	Misc. sects. to catch toe of fills & end for Approach Ramp.
134+45	134+65	18	107.3	Replace Conc. Panel section.
143+74	143+93	19	57.8	
144+25	144+35	9	17.4	
152+50	153+20	90	410.0	Support Bulkhead for Ramp.
158+15	158+50	40	124.0	Retaining wall for Driveway Approach
158+80	159+10	30	108.0	
164+65	165+80	167	828.2	Ret. wall for Approach & Parking Area
170+68	170+86	18	101.2	
171+15	171+13	22	69.5	
178+20	178+65	45	184.7	
			2,504.2	Total

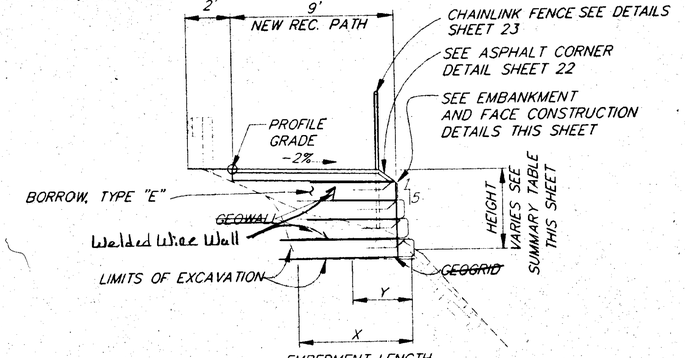
REMARKS

- 3' GEOWALL ON TOP OF ROCKERY
- HT 26
- 3' GEOWALL ON TOP OF ROCKERY
- 3' GEOWALL ON TOP OF ROCKERY
- 3' GEOWALL ON TOP OF ROCKERY
- 3' GEOWALL ON TOP OF ROCKERY
- 3' GEOWALL ON TOP OF ROCKERY
- 3' GEOWALL ON TOP OF ROCKERY
- 3' GEOWALL ON TOP OF ROCKERY

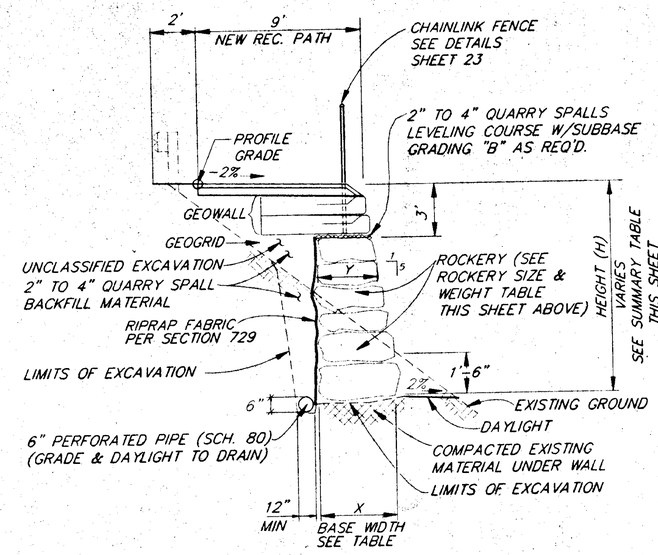
AT GEOWALLS

LL = 1,885 L.F.
/BBASE/L.F. WALL = 3.25'
25+27 = 230 C.Y.

NOTE:
SEE ASPHALT PAVEMENT CORNER DETAIL, SHEET 22.



GEOWALL DETAILS (TYPICAL NO. 6)



ROCKERY DETAILS (TYPICAL NO. 7)

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SE

STATE OF ALASKA 19th W.J. Holbrook 6-5265 REGISTERED PROFESSIONAL ENGINEER

PATH: P:\KTN\71372\DR\-DET3 PLOTF.PCP(12) OR PLOTH.PCP(24)

BY:	DATE:	DESCRIPTION OF CHANGE:

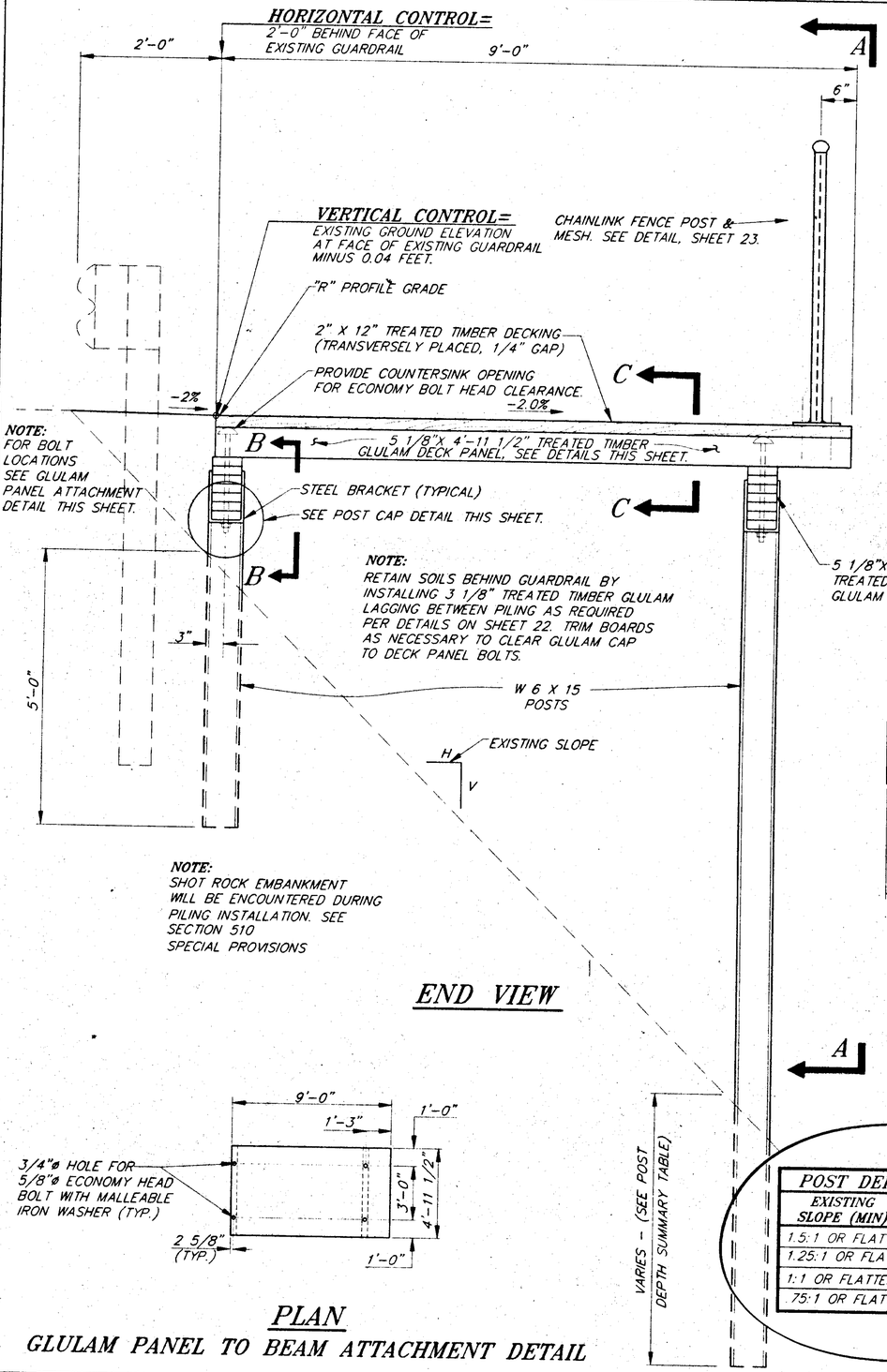
RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

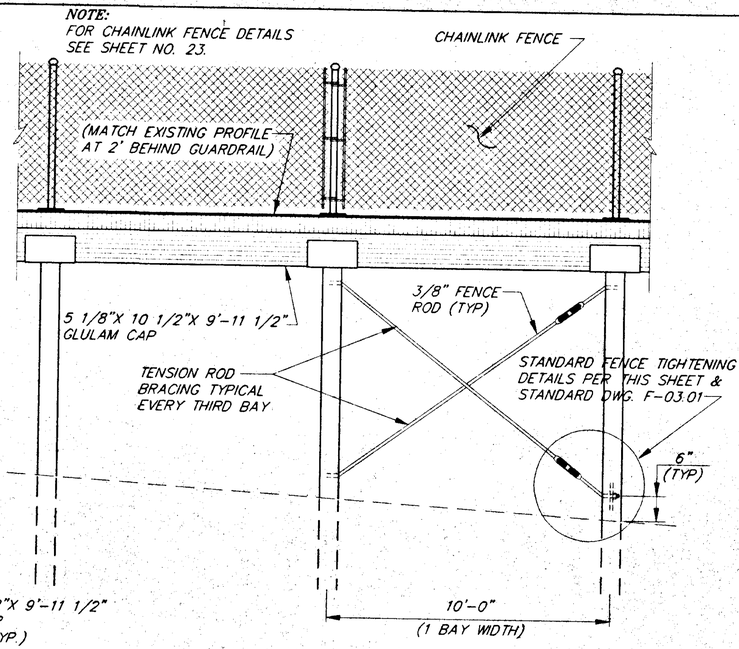
GEOWALL & ROCKERY WALL DETAILS

DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY: C. BECKER	DATE: AUGUST 1995
CHECKED BY: C. MORROW	SHEET 20 OF ~~37~~ 38

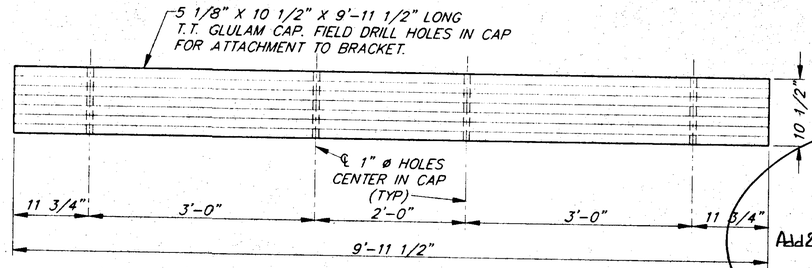


END VIEW

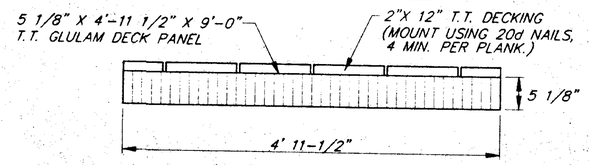
PLAN
GLULAM PANEL TO BEAM ATTACHMENT DETAIL



ELEVATION A-A

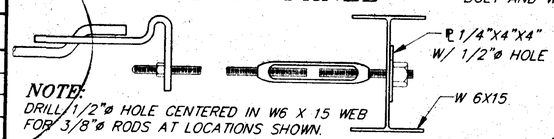


GLULAM CAP



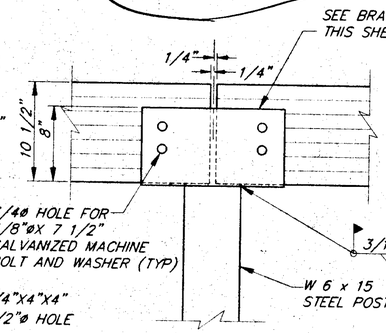
SECTION VIEW C-C
GLULAM DECK PANEL

POST DEPTH SUMMARY	
EXISTING SLOPE (MIN)	MINIMUM DEPTH (FT)
1.5:1 OR FLATTER	5'
1.25:1 OR FLATTER	7'
1:1 OR FLATTER	9'
75:1 OR FLATTER	11'

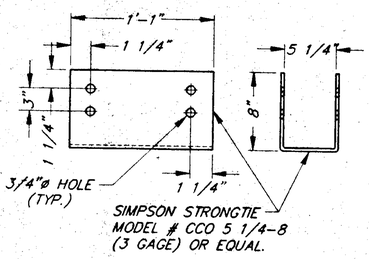


NOTE:
DRILL 1/2"ø HOLE CENTERED IN W6 X 15 WEB FOR 3/8"ø RODS AT LOCATIONS SHOWN.

TYPICAL DETAIL
TENSION ROD TIGHTENERS



POST CAP DETAIL
VIEW B-B



BRACKET DETAIL

GENERAL NOTES:

1. APPROXIMATE PANEL WEIGHT = 825#; GLULAM CAP WT. = 160#; DESIGN VEHICLE LOAD = 3 TON.
2. ALL TREATED TIMBER GLULAMS SHALL BE COASTAL DOUGLAS FIR, COMBINATION L-3 (PANELS) OR 18F (CAP) OR BETTER RATED FOR WET USE CONDITION. PRESERVATIVE TREATMENT SHALL BE PENTACHLOROPHENOL PRESERVATIVE, 0.5 pcf RETENTION BY ASSAY, SAMPLING DEPTH 0 TO 0.6 INCHES; IN ACCORDANCE WITH A.W.P.A. C2 STANDARDS.
3. ALL STRUCTURAL STEEL SHALL BE A-36 OR BETTER. ALL HARDWARE A-307 OR BETTER. ALL STRUCTURAL STEEL AND HARDWARE SHALL BE HOT DIP GALVANIZED MEETING REQUIREMENTS A-153.
4. DAMAGED POSTS (BENT) SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
5. TREATED TIMBER PLANKS SHALL BE WESTERN HEMLOCK-FIR (MIN.) S4S DIMENSIONAL LUMBER. TREATMENT SHALL BE A.C.Z.A. OR EQUIVALENT, 0.4PCF RETENTION BY ASSAY, PENETRATION = 0.4 INCHES IN ACCORDANCE WITH A.W.P.A. C2 STANDARD SPECIFICATIONS.
6. CONTRACTOR IS PERMITTED TO USE 20' POST SPACING. IF HE ELECTS TO USE THIS SPACING, 5 1/8" X 1'-3" X 19'-11 1/2" GLULAM CAPS SHALL BE SUBSTITUTED FOR THOSE SHOWN. ALL OTHER DETAILS THE SAME EXCEPT TENSION RODS SHALL BE USED AT EVERY OTHER BAY. IF GLULAM LAGGING IS REQUIRED, AN ADDITIONAL POST AT 10'-0" SPACING AS SHOWN SHALL BE REQUIRED FOR POSTS CLOSEST TO HIGHWAY.

TREATED TIMBER SUMMARY

STATION TO STATION	LENGTH	DECK PANELS NO.	DECK PANELS 1000 BOARD FEET (MBM)	CAPS NO.	CAPS 1000 BOARD FEET (MBM)	BOARDS NO.	BOARDS 1000 BOARD FEET (MBM)
112+10 TO 114+50	240	48	11.07	48	2.26	240	4.32
122+25 TO 122+45	20	4	0.92	4	0.19	20	0.94
134+35 TO 134+55	20	4	0.92	4	0.19	20	0.94
139+15 TO 139+45	30	6	1.38	6	0.28	30	0.54
146+70 TO 150+10	340	68	15.68	68	3.20	340	6.12
174+15 TO 175+45	130	26	6.00	26	1.22	130	2.34
TOTAL =	780 LF	156	35.97	156	7.34	780	15.20

STRUCTURAL STEEL (BRACKET, & POST) SUMMARY

STATION TO STATION	BRACKET NO.	POST MAX. LENGTH UPPER	POST MAX. LENGTH LOWER	POST NO. OF PILES	POST TOTAL LENGTH
112+10 TO 114+50	48	6'	12'	50	450'
122+25 TO 122+45	4	6'	8'	6	42'
~~134+35 TO 134+55~~	~~4~~	6'	9'	6	45'
139+15 TO 139+45	6 30	6'	10'	8	60'
146+70 TO 150+10	68 340	6'	18'	70	840'
~~174+15 TO 175+45~~	26	6'	12'	28	252'
TOTAL =	156			TOTAL =	1,690'

Delete 20'
Add 20' 174+45 - 175+50

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
49th
James Altmayer
W.J. Holbrook

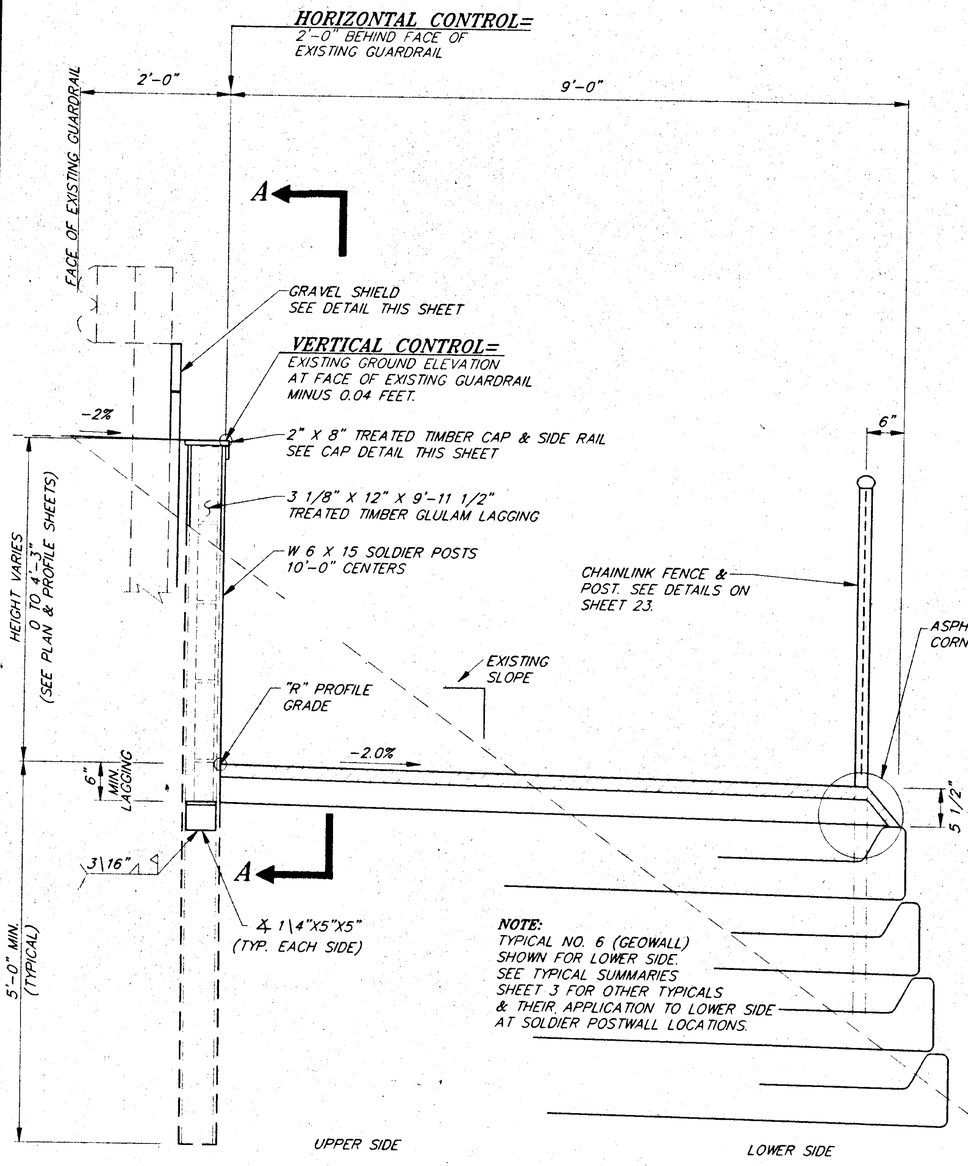
PATH: P:\KTN\71372\DR\-PANEL PLOTF.PCP(12) OR PLOTH.PCP(24)

BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

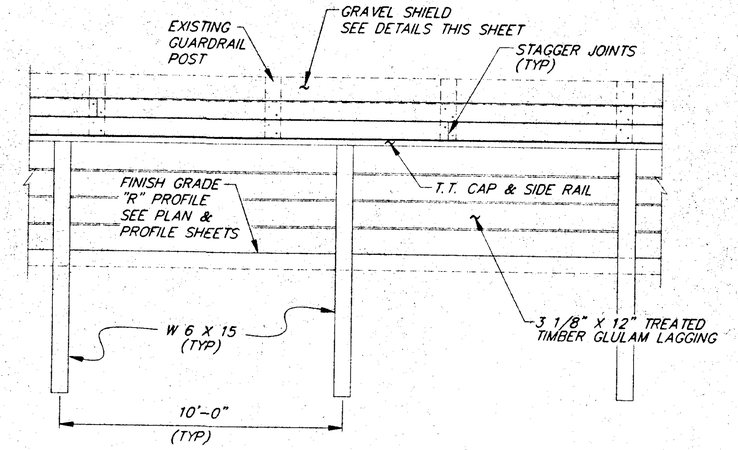
KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902(18) 71372

DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY:	DATE:

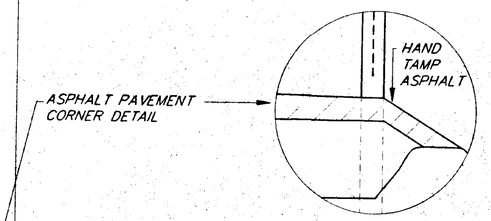


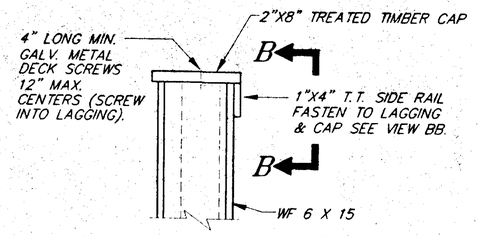
END VIEW

NOTE:
SHOT ROCK EMBANKMENT WILL BE ENCOUNTERED DURING POST INSTALLATION OPERATIONS. SEE SPECIAL PROVISIONS SECTION 509 FOR ADDITIONAL INFORMATION.

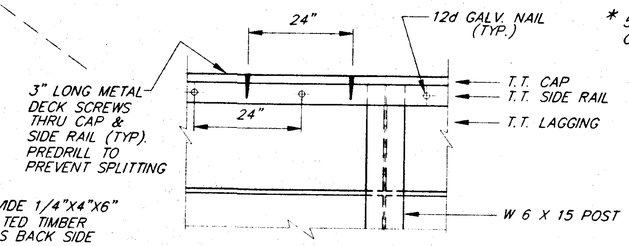


ELEVATION A-A



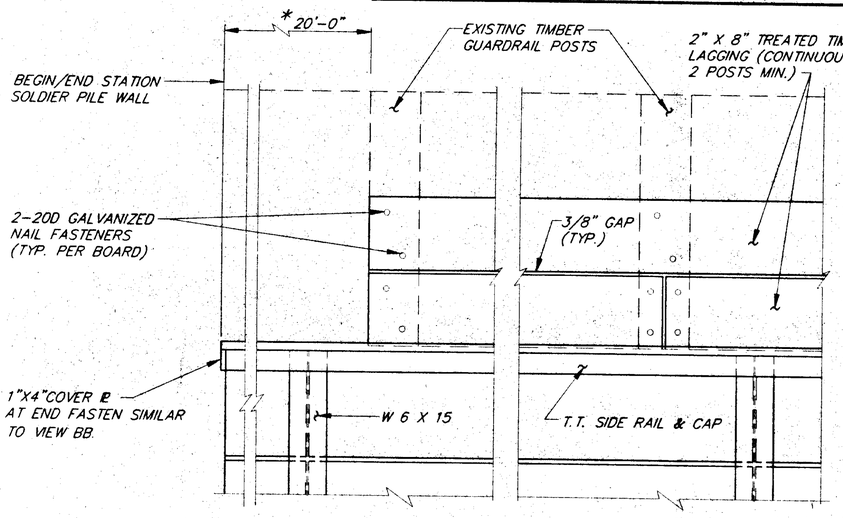


CAP DETAILS



NOTE:
PROVIDE 1/4"X4"X6" TREATED TIMBER SHIMS BACK SIDE SIDE RAIL TO LAGGING CONNECTION AT 12d NAIL LOCATIONS.

VIEW BB



GRAVEL SHIELD DETAILS

* 50'-0" LOCATIONS NOTED IN GRAVEL SHIELD SUMMARY.

GENERAL NOTES:

1. ALL POSTS, CAPS AND ASSOCIATED HARDWARE SHALL BE HOT DIP GALVANIZED PER ASTM A-153.
2. WELD DAMAGED GALVANIZE COATING SHALL BE FIELD REPAIRED BY HOT STICK ZINC REPAIR METHOD TO THE SATISFACTION OF THE ENGINEER (PER SECTION 509-3.04).
3. POSTS SHALL BE DRIVEN OR PLACED IN DRILLED HOLES AS REQ'D. TO THE DEPTHS SHOWN. SEE SPECIAL PROVISION SECTION 509. TREATED TIMBER GLULAM LAGGING AND CAPS SHALL BE DOUGLAS FIR OR LARCH COMBINATION L-3 AND 18F, RESPECTIVELY.
4. TREATED TIMBER PLANKS MAY BE ROUGH SAWN HEMLOCK-FIR OR LARCH. TREATMENT FOR ALL TIMBER SHALL BE ACZA PRESERVATIVE OR EQUIVALENT, 0.4 PCF RETENTION BY ASSAY, PENETRATION = 0.4 INCHES IN ACCORDANCE WITH A.W.P.A. C2 STANDARD SPECIFICATIONS.

SOLDIER POST WALL SUMMARY

STATION TO STATION	POST: WALL LENGTH (L.F.)	POST: NO. OF POST LOCATIONS	LAGGING: AVERAGE WALL HEIGHT (FEET)	LAGGING: AVERAGE WIDTH X LENGTH (S. F.)	LAGGING: THOUSAND BOARD FEET (MBM)
115+~~25~~ TO ~~118+25~~ 65	~~300~~ 290	31	2'	750	2.3
~~118+75~~ TO 122+85	~~410~~ 370	42	2.5'	1230	3.8
125+~~00~~ TO 128+~~80~~ 60	~~380~~ 310	39	3'	1330	4.2
140+05 TO 144+75	470	48	3'	1645	5.1
159+~~75~~ TO 161+75	~~230~~ 210	24	1.5'	460	1.4
168+50 TO 171+00	250	26	1.5'	500	1.6
TOTALS =	~~2,040~~ 1960	= 210			**TOTAL =18.4 MBM**
ASSUMED POST LENGTH =	10 L.F.				**BOARD FEET**
TOTAL LF POST =	210 X 10 = 2100 L.F.				**LAGGING**

GRAVEL SHIELD FENCE SUMMARY

STATION TO STATION	FENCE: LENGTH	FENCE: HEIGHT	THOUSAND BOARD FEET (MBM)
*115+75 TO 118+05	230'	1'-3"	0.58
118+95 TO 122+65	370'	1'-3"	0.93
*125+50 TO 128+60	310'	1'-3"	0.78
140+25 TO 144+55	430'	1'-3"	1.08
159+65 TO 161+55	190'	1'-3"	0.48
168+70 TO 170+80	210'	1'-3"	0.53
TOTAL S.F. FENCE =	4.38		

PATH: P:\KTN\71372\DR\-PILE PLOTF.PCP(12) OR PLOTH.PCP(24)

BY:	DATE:	DESCRIPTION OF CHANGE:

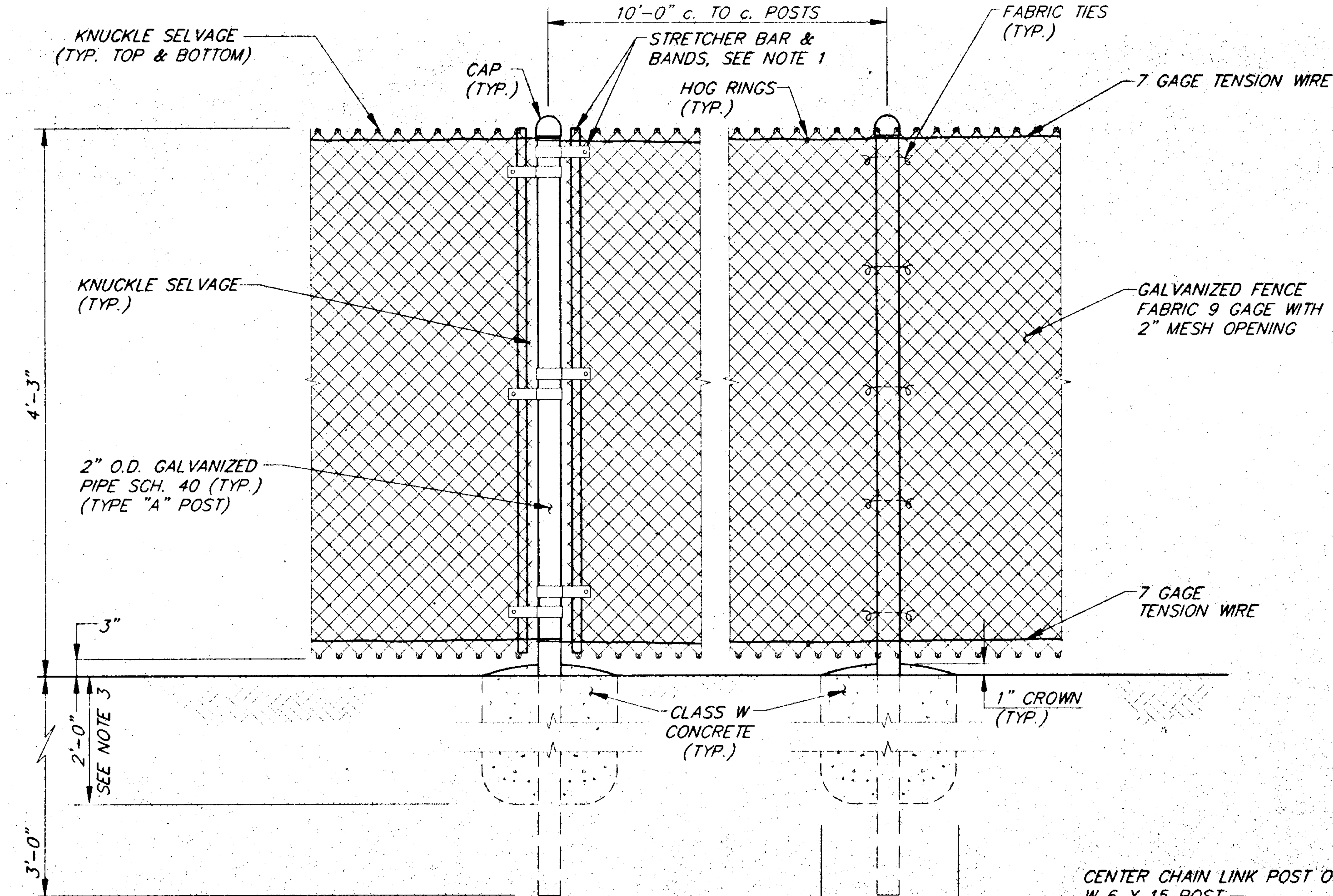
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION

KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

DESIGNED BY: W. HOLBROOK
PROJECT NO. 71372

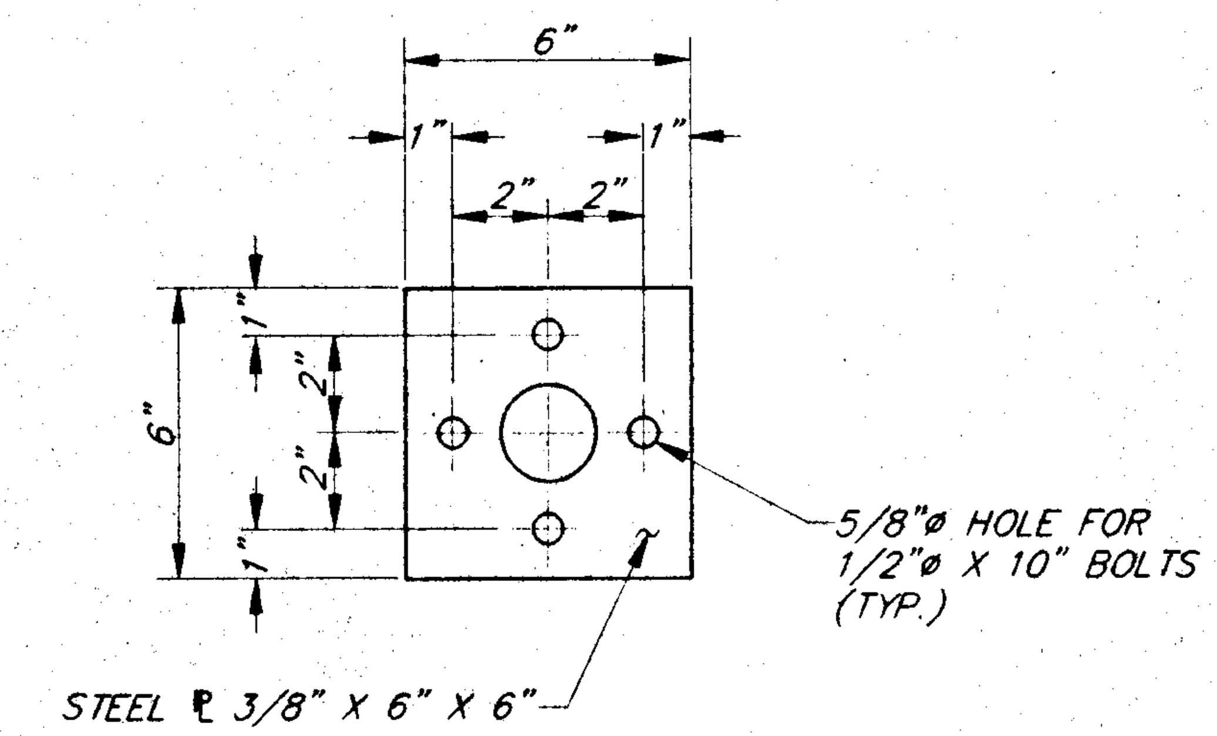
ENGINEER'S SEAL
STATE OF ALASKA 49th



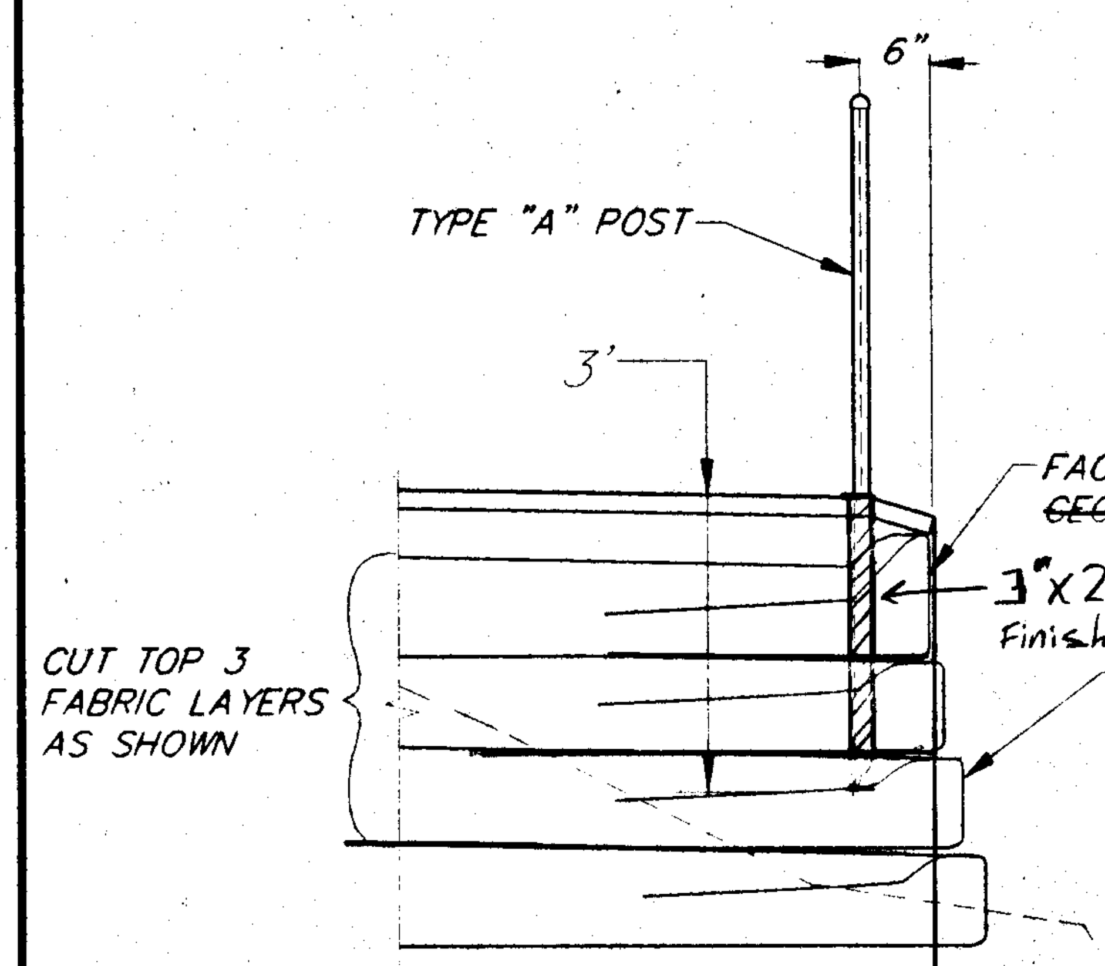
ELEVATION

RAILPOST ~ RAILING DETAILS

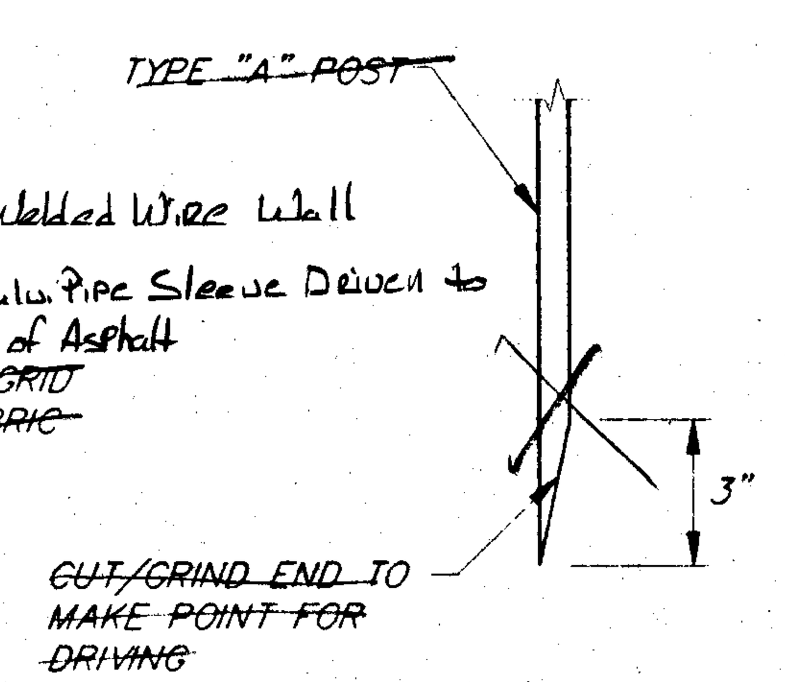
(TYPE "A" POST LOCATIONS)



BASE PLATE DETAIL



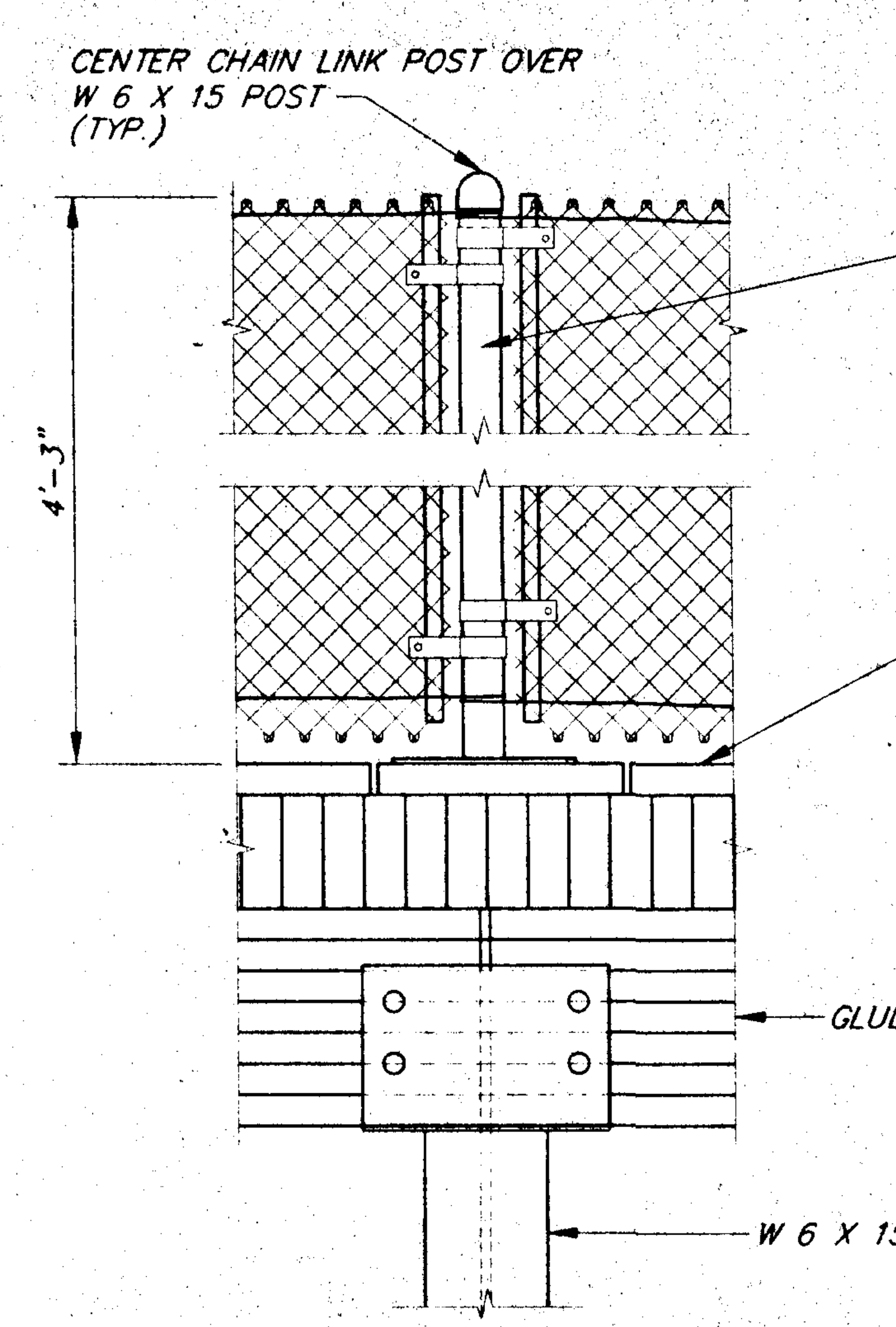
SECTION



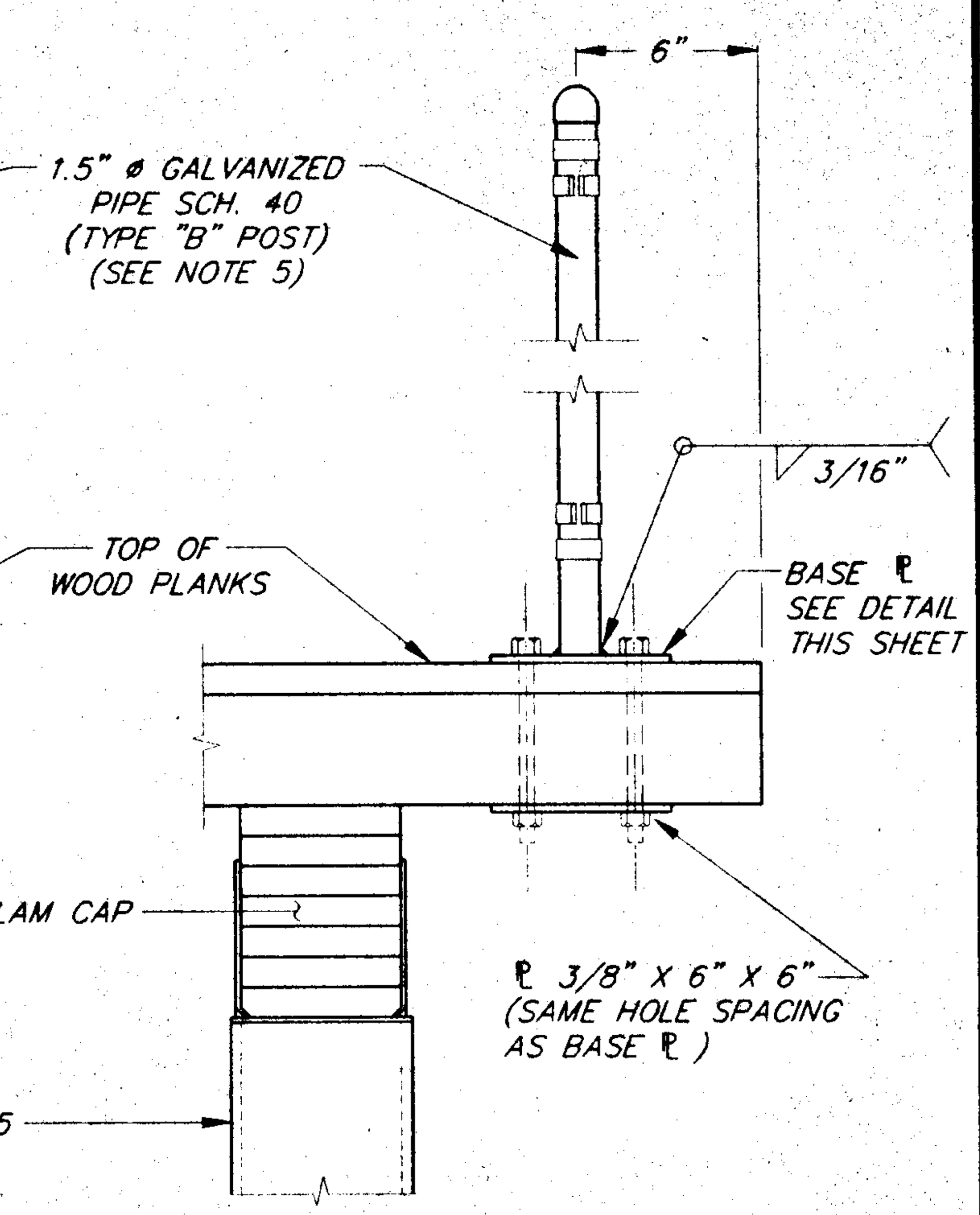
~~SHARPENED END DETAIL~~

POST EMBEDMENT DETAIL

(GEOWALL AREAS ONLY)



ELEVATION



END VIEW

RAILPOST ~ RAILING DETAILS

(TYPE "B" POST LOCATIONS)

CHAINLINK FENCE NOTES

1. CONTRACTOR SHALL BE REFERRED TO STANDARD DRAWING F-01.01 FOR TYPICAL DETAILS EXCEPT AS NOTED THIS SHEET.
2. CHAINLINK FENCE, PIPE AND ASSOCIATED HARDWARE SHALL BE GALVANIZED PER ASTM A-153.
3. FOUNDATION DEPTHS AND WIDTHS SHOWN IN TABLE IN STANDARD DRAWING F-01.01 MAY BE SUBSTITUTED FOR THOSE SHOWN WHERE DEPTHS GIVEN IN TABLE CAN BE OBTAINED.
4. FABRIC SHALL BE PLACED ON HIGHWAY SIDE OF POST.
5. TYPE "B" POSTS REQUIRED AT GLULAM PANEL STRUCTURE. ALL POST DIMENSIONS, CHAINLINK HARDWARE AND SPACINGS SAME AS TYPE "A" POST LOCATIONS EXCEPT AS NOTED.
6. MINIMUM POST SPACING OF 7'-6" SHALL BE MAINTAINED AT ALL LOCATIONS, 10'-0" MAXIMUM.
7. CHAINLINK POST LOCATIONS (TYPE A POSTS ONLY) MAY BE ADJUSTED OUTWARD WHERE ROOM IS AVAILABLE TO DO SO, SUBJECT TO ENGINEER APPROVAL. SEE TYPICAL SECTIONS SHEET 2 FOR ADDITIONAL DETAILS.
8. TERMINAL POSTS SHALL BE OFFSET 2 FEET OUT TO PROVIDE A FLARED END. PULL POSTS PER STANDARD DRAWING F-01.01 SHALL BE 2 INCH NOMINAL DIAMETER AND LOCATED AT FIRST POST PRIOR TO TERMINAL POSTS.

CHAINLINK FENCE SUMMARY TABLE

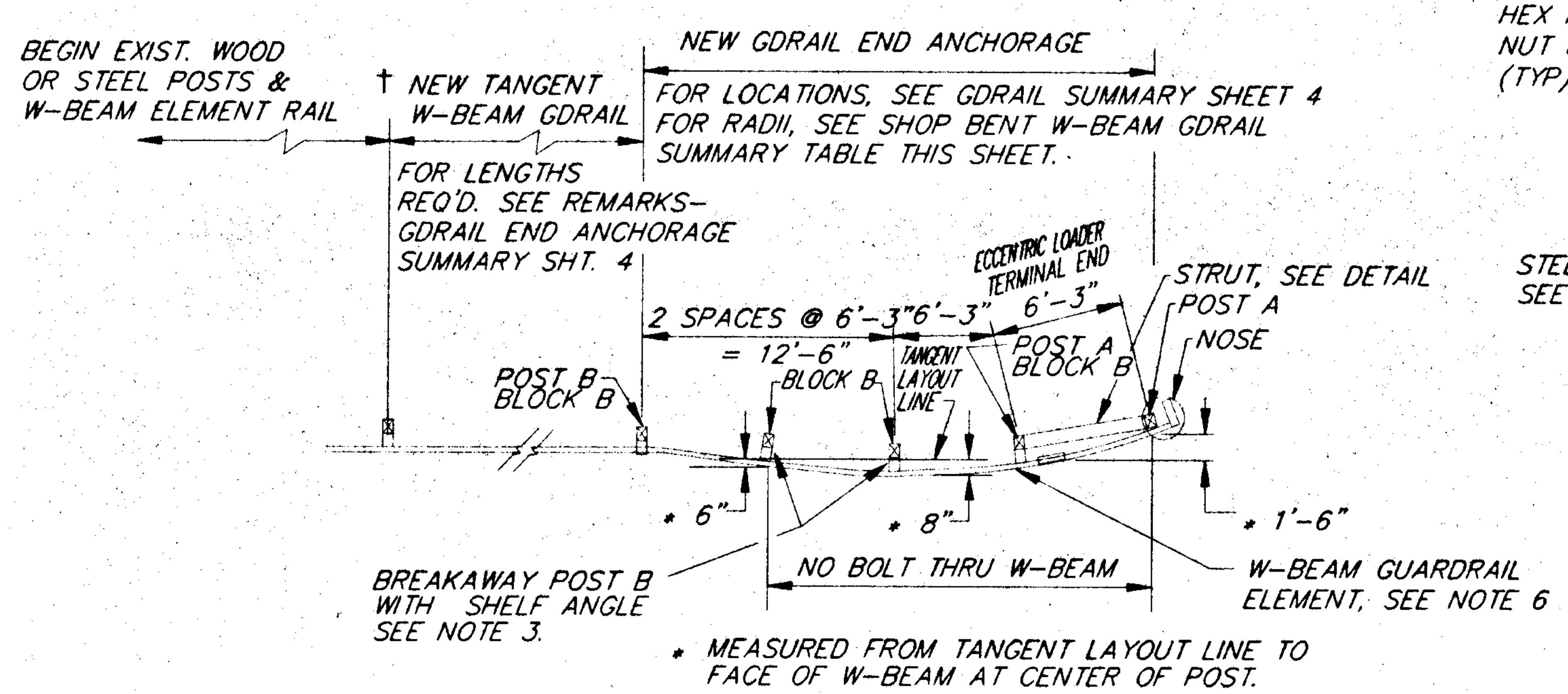
Chain Link Fence

Station	to Station	Length (LF ms)	Remarks
112+05	114+73	268.2	
115+90	118+26	236.6	
120+15	123+45	330.0	
125+50	126+40	90.2	
127+60	129+00	140.1	
131+00	131+50	52.2	~~to~~ attach to carport
131+65	132+05	43.1	" " "
132+50	133+40	89.3	
133+45	135+42	197.0	
136+15	137+45	129.6	
138 ~	141+66	365.8	
142+30	151+10	915.1	+ Widening area for benches
152+40	153+20	92.7	+ Fence @ bulkhead for Ramp
158+30	159+10	79.2	
159+90	161+67	176.9	
164+92	168+72	378.7	
168+77	173+12	434.7	
173+40	178+90	551.1	
		4,5705LF	Total

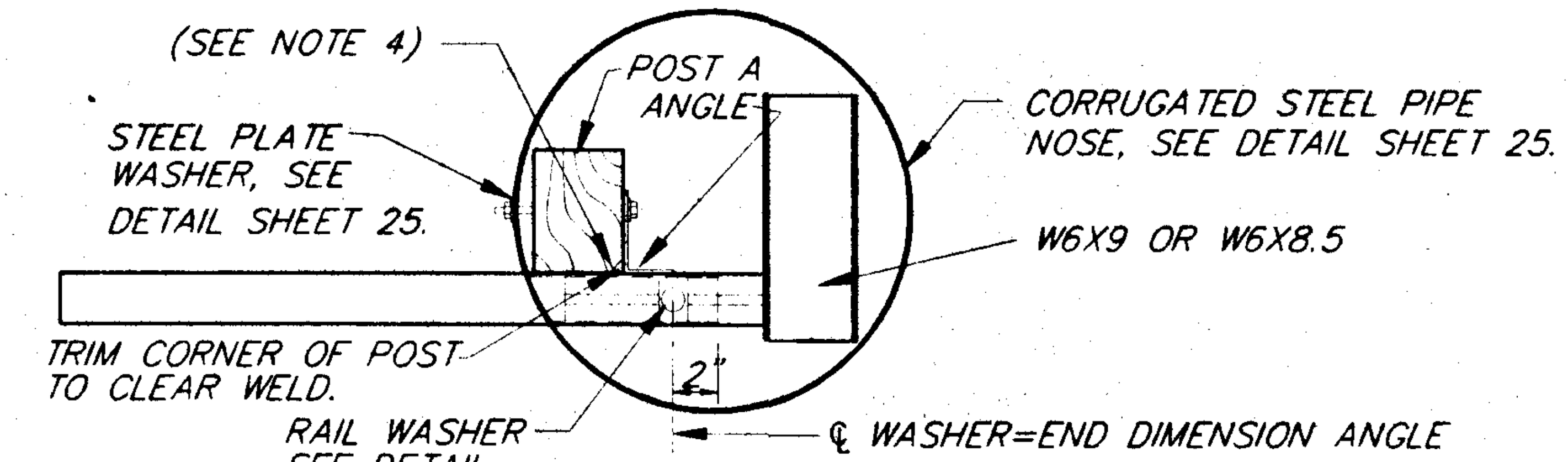
PATH: P:\KTN\71372\DR\-RAIL PLOT:PCP(6) OR PLOTH PCP(6)			STATE OF ALASKA DEPARTMENT OF TRANSPORTATION	KETCHIKAN — SOUTH TONGASS HIGHWAY COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH PROJECT NO. TE-0902 (18) 71372 — ALASKA	DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372	ENGINEER'S SEAL
BY:	DATE:	DESCRIPTION OF CHANGE:			DRAWN BY:	DATE:	STATE OF ALASKA 49th W. J. Holbrook

ECCENTRIC LOADER NOTES:

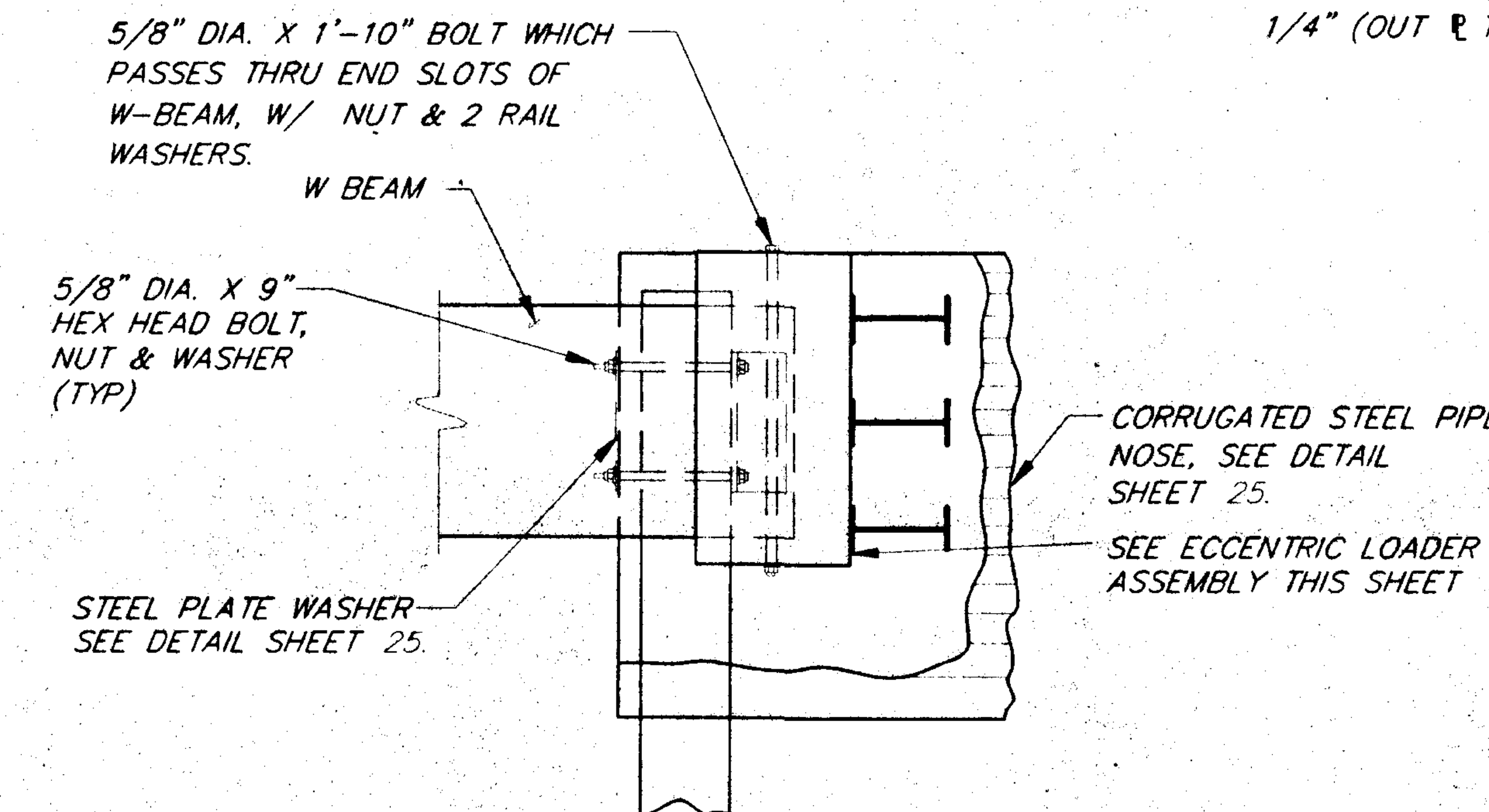
1. FOR ANCHOR PLATE AND ANCHOR CABLE DETAILS, SEE STANDARD DWG. G 14.04S & G 14.04W CABLE ANCHOR PLATE DETAILS.
2. OUTSIDE NUT SHALL BE TORQUED AGAINST INSIDE NUT A MINIMUM OF 100 FT-LBS.
3. ATTACH SHELF ANGLE TO POST WITH 5/8" DIA X 18" BUTTON HEAD BOLT, WASHER AND NUT. THE W BEAM RESTS ON THE SHELF ANGLE AND IS NOT BOLTED TO THE SHELF ANGLE OR POST.
4. CUT CORNER OFF TOP 1' OF POST TO ALLOW ROOM FOR 3/8" FILLET WELD.
5. TWO 8d NAILS SHALL BE DRIVEN INTO THE WOOD POST AT THE TOP OF THE BEARING PLATE TO PREVENT ROTATION OF PLATE.
6. STANDARD BEAM GUARDRAIL, SEE STANDARD DWG. G-04.04S & G-04.05W FOR DETAILS.
7. W-BEAM SHALL BE SHOP BENT.
8. TIMBER BLOCK SHALL BE TOE NAILED TO POST WITH A 16d GALVANIZED NAIL TO RESTRICT BLOCK ROTATION.



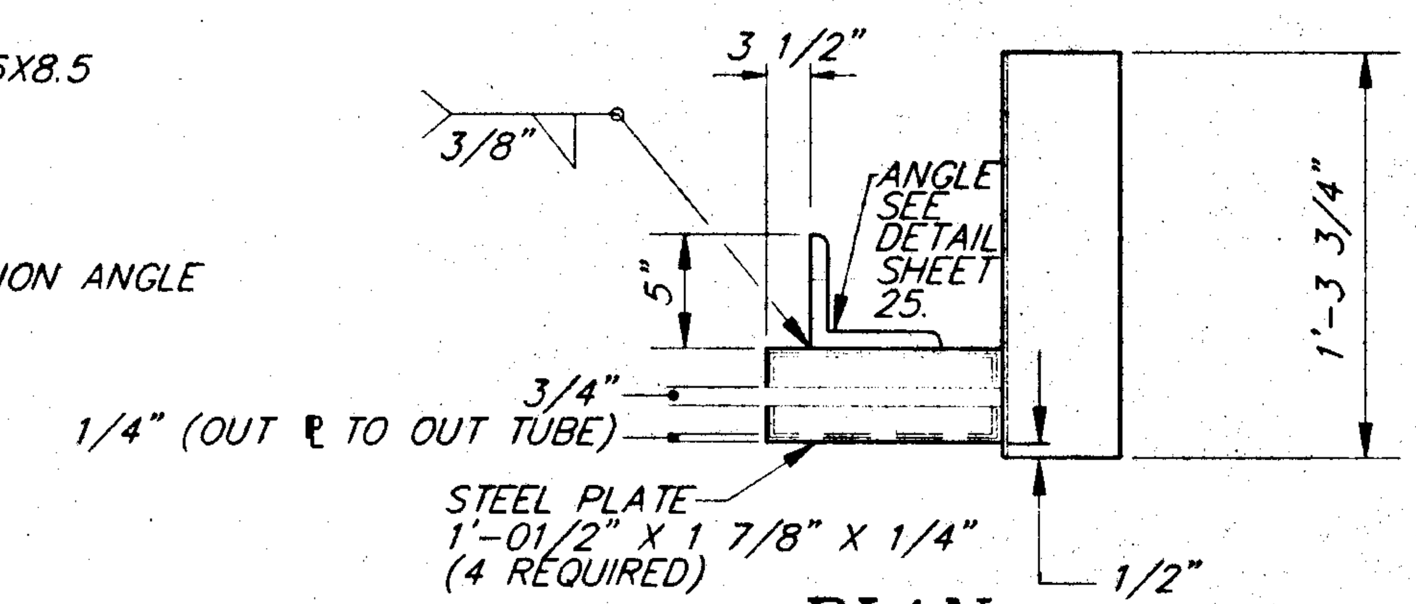
PLAN
ECCENTRIC LOADER TERMINAL SECTION



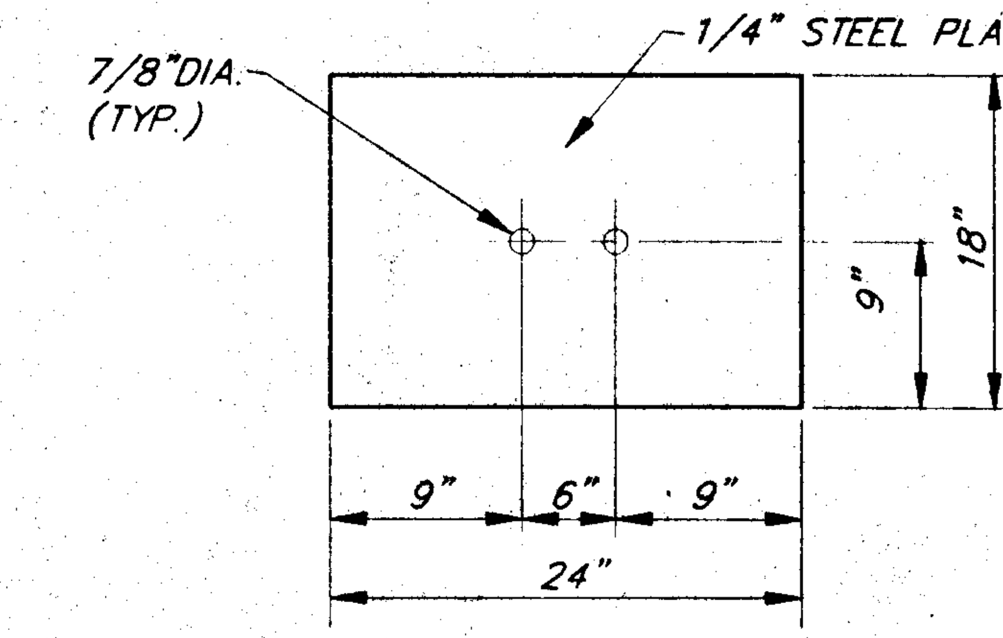
PLAN



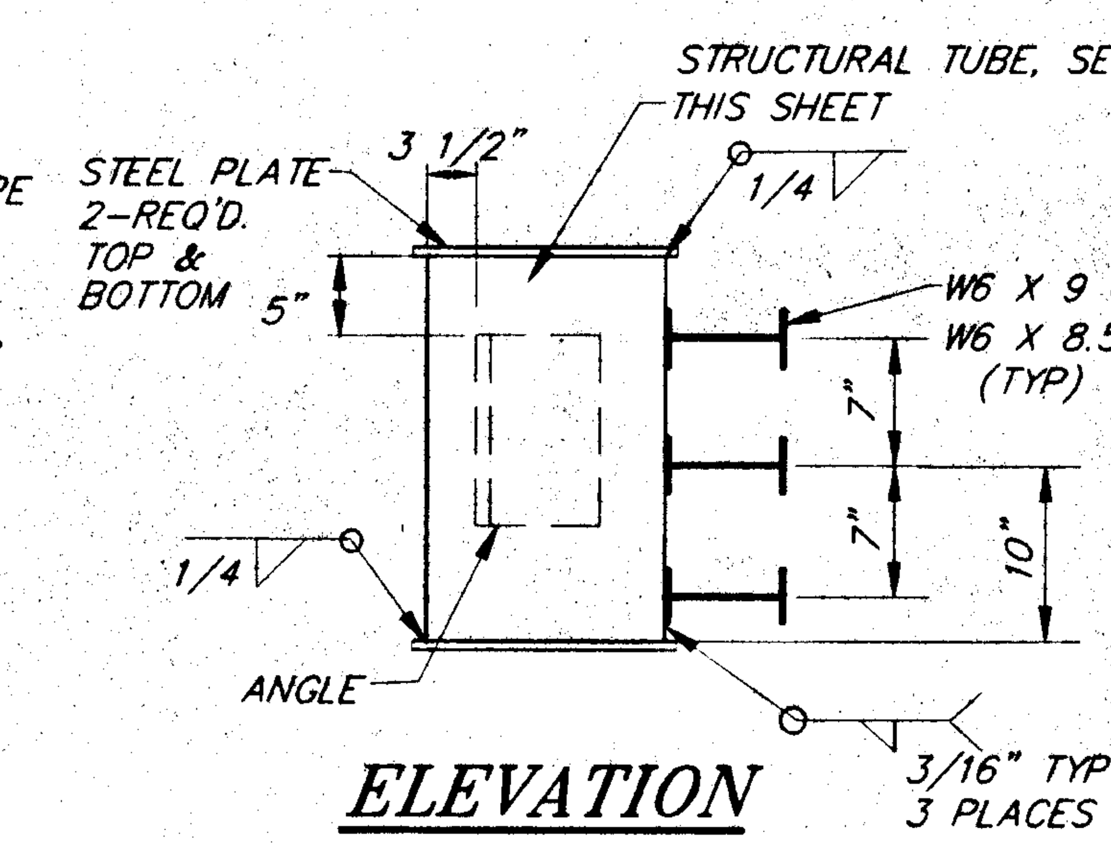
ELEVATION
ECCENTRIC LOADER ASSEMBLY



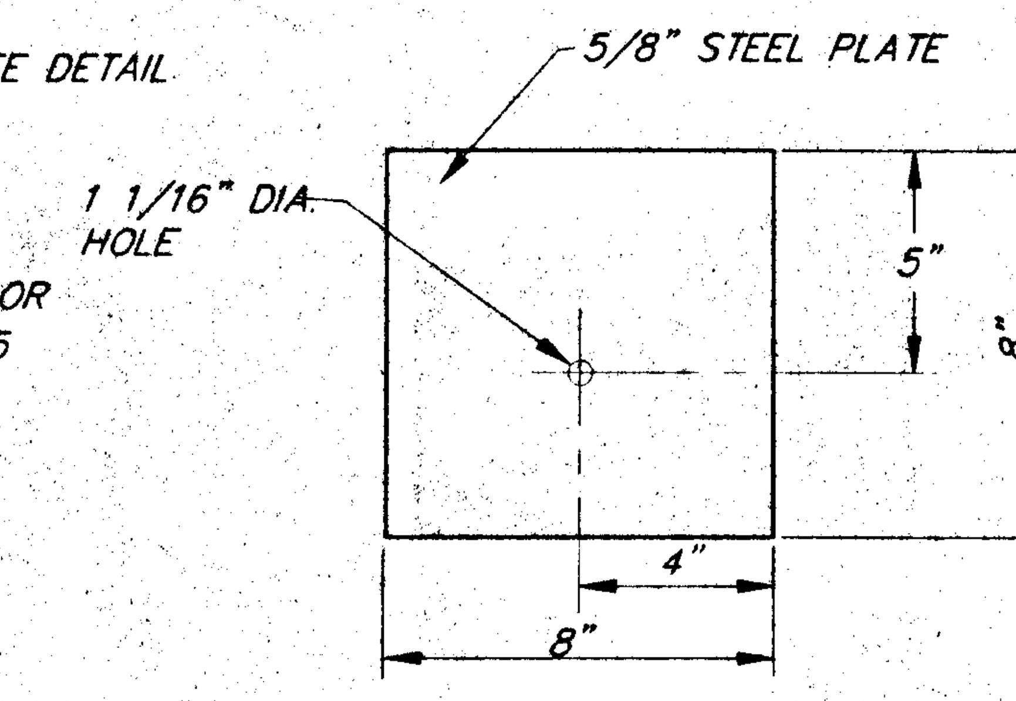
PLAN



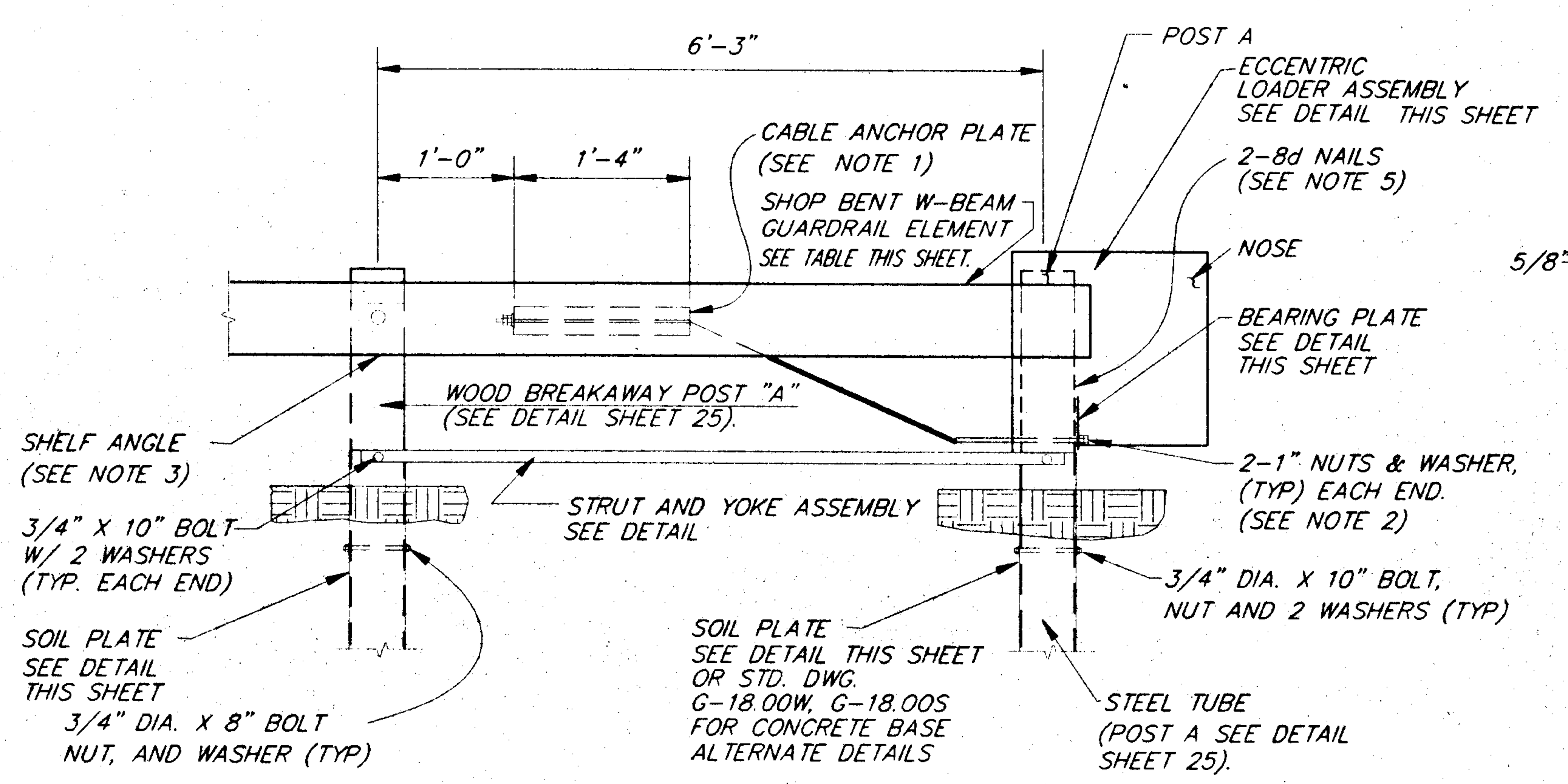
SOIL PLATE DETAIL
(2 REQ'D.)



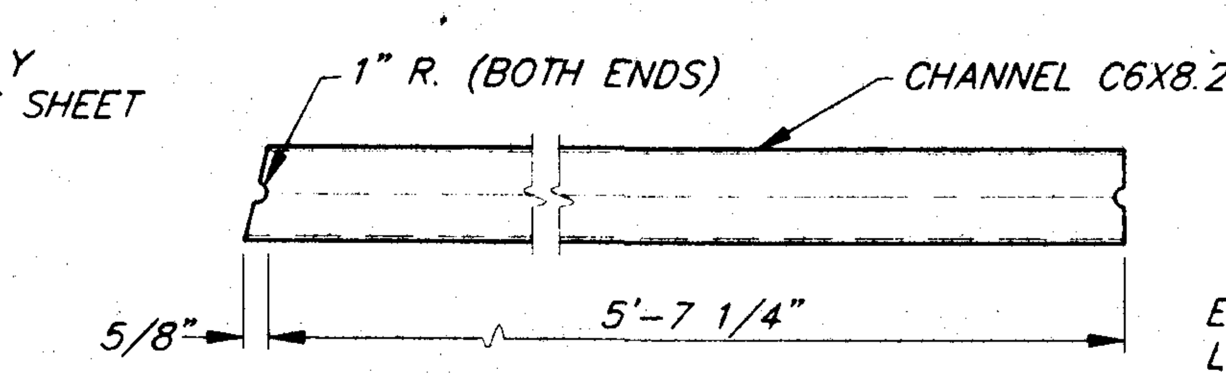
ELEVATION
ECCENTRIC LOADER ASSEMBLY



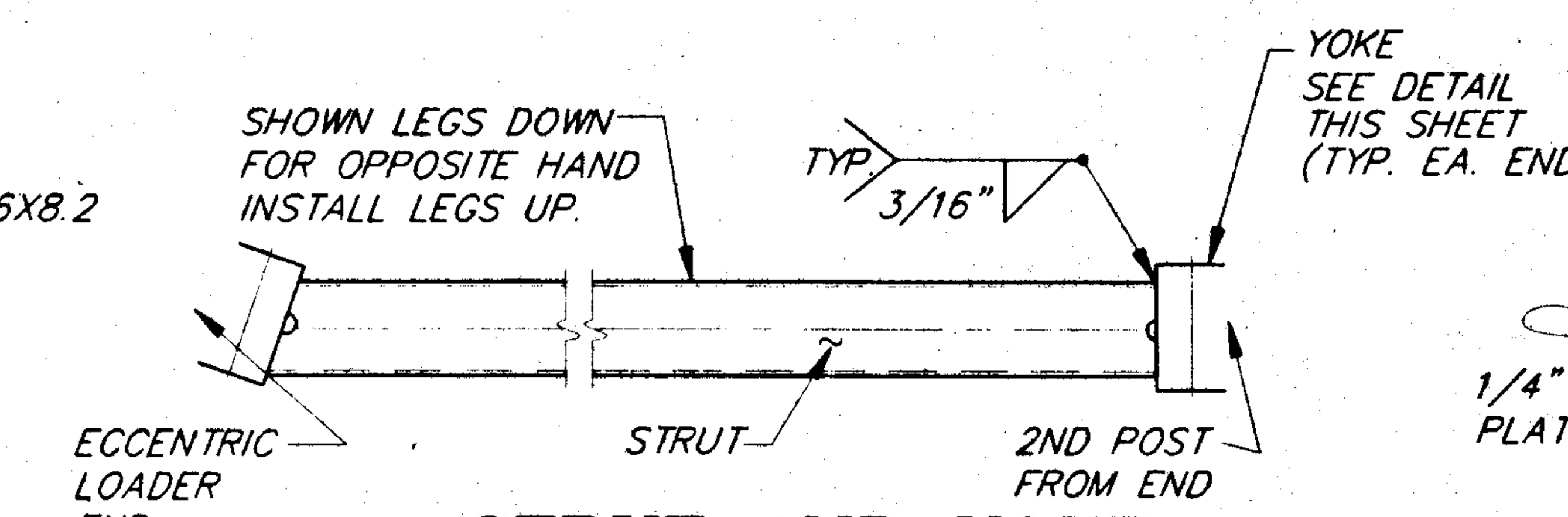
BEARING PLATE DETAIL



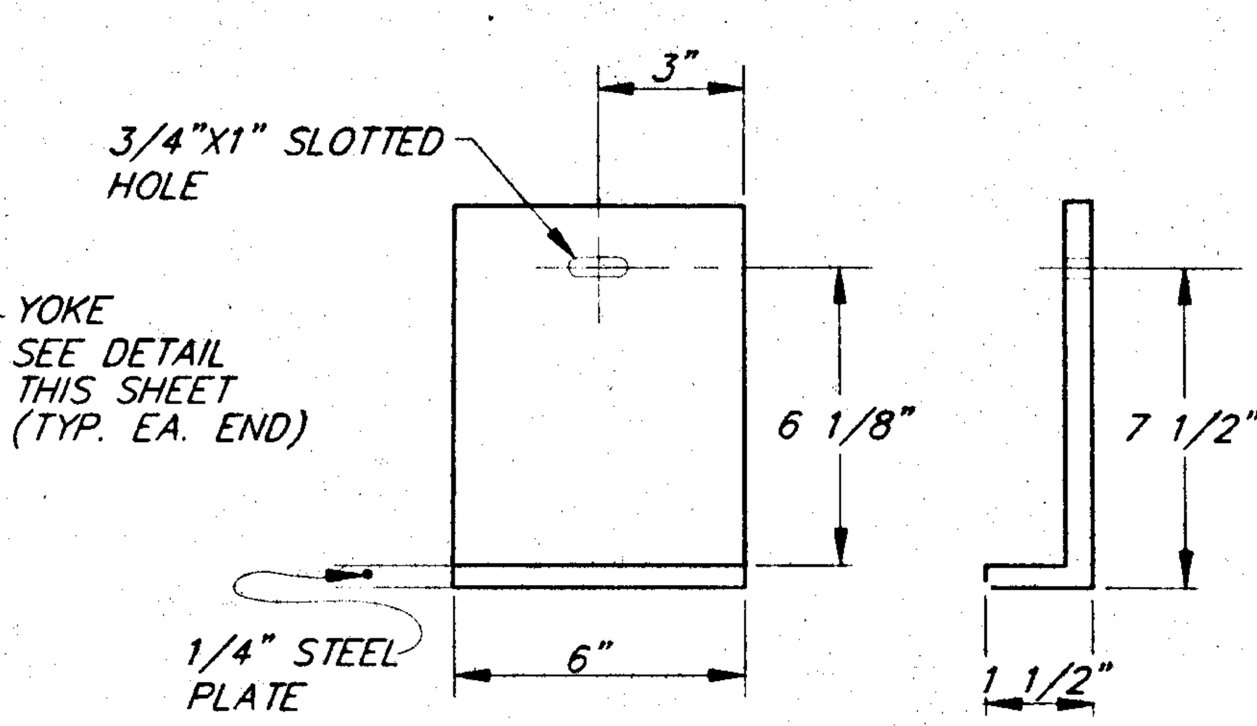
ELEVATION
ECCENTRIC LOADER TERMINAL END



STRUT DETAIL

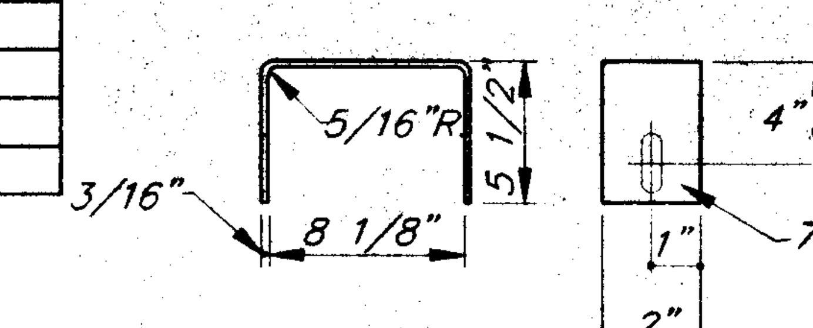


STRUT AND YOKE ASSEMBLY DETAIL

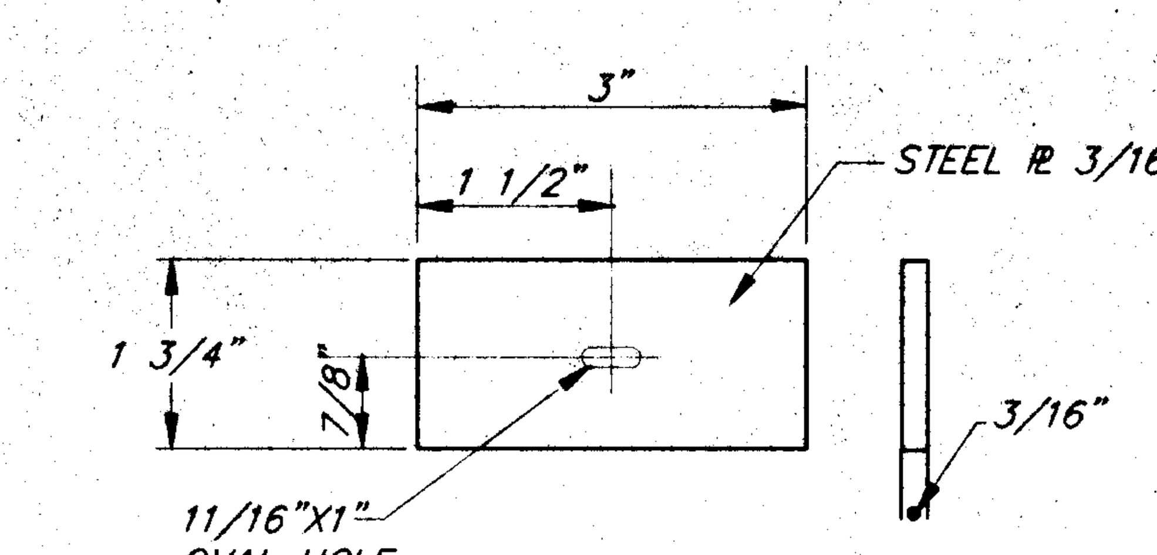


SHELF ANGLE DETAIL
(3 REQ'D.)

SHOP BENT W-BEAM GDRAIL SUMMARY TABLE				
LOCATION	TO	LOCATION	RADIUS	REMARKS
NOSE END TERMINAL	"	12'-6"	37'	
12'-6"	"	18'-9"	117'	
18'-9"	"	25.0"	39'	REVERSE CURVE



YOKE DETAIL



RAIL WASHER DETAIL

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

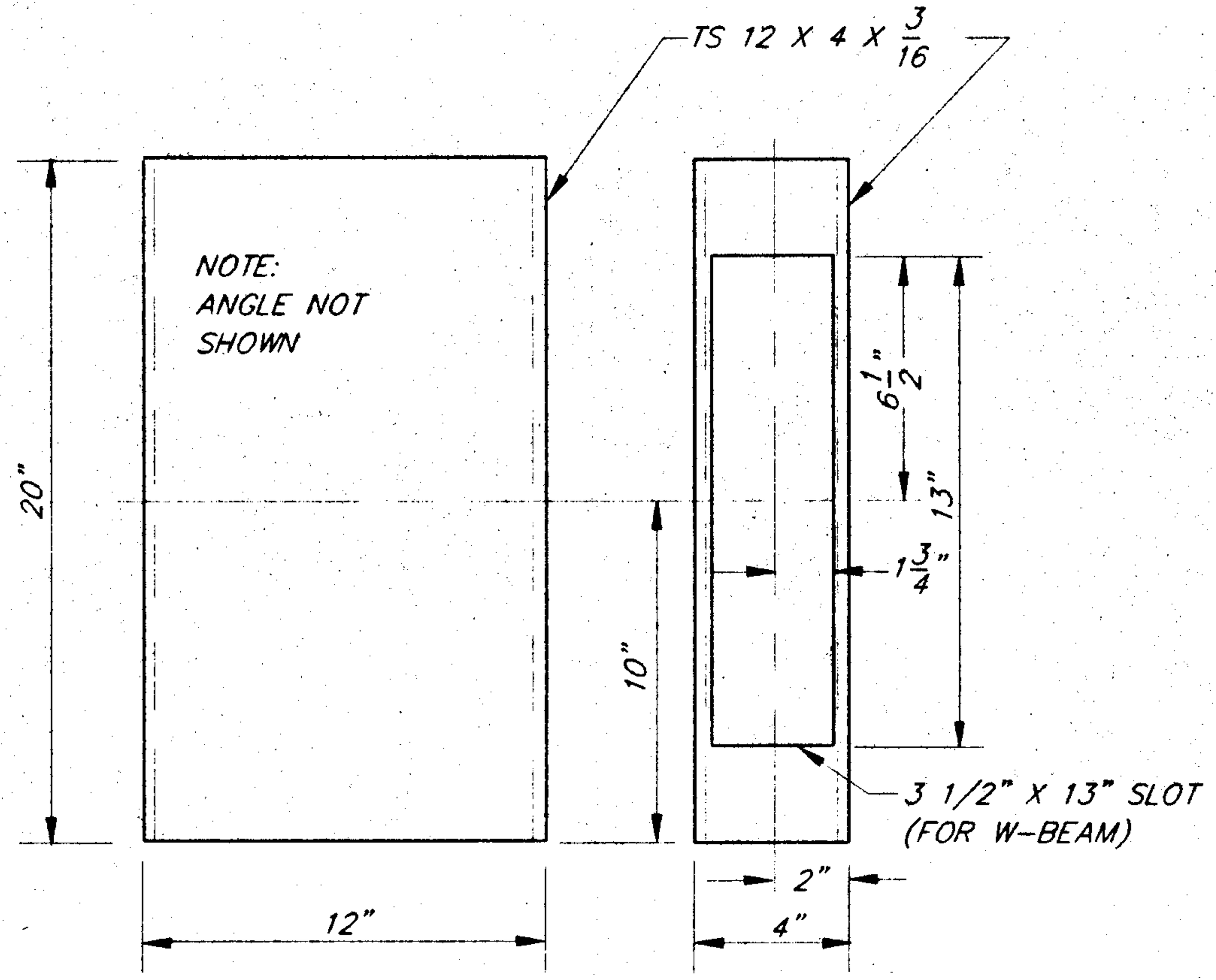
ENGINEER'S SEAL

PATH:		
BY:	DATE:	DESCRIPTION OF CHANGE:

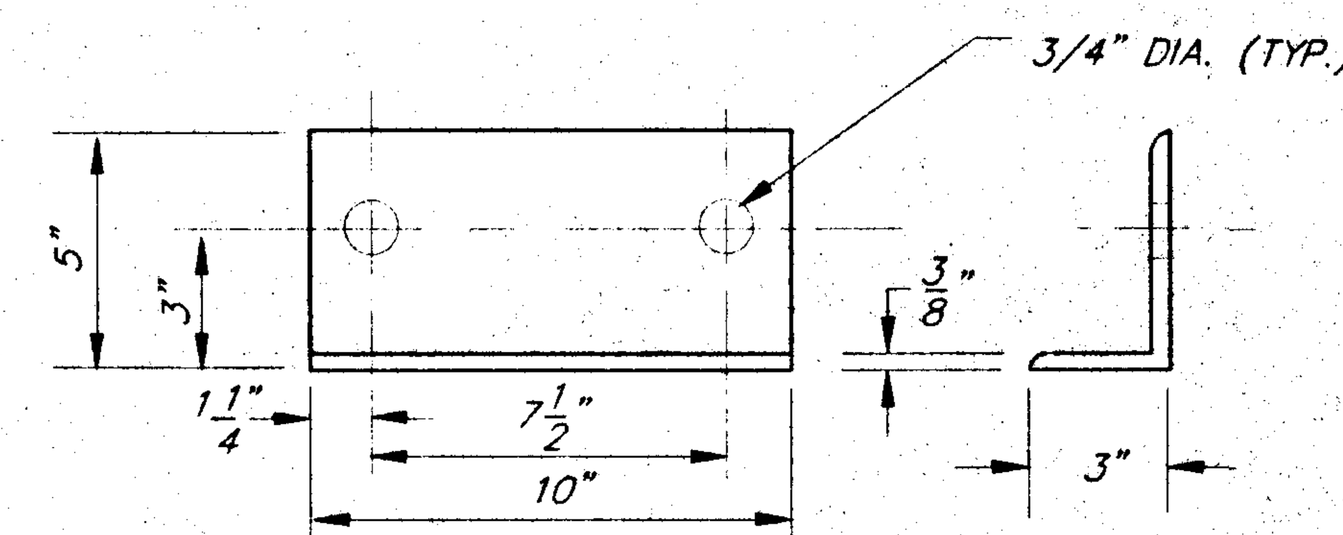
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

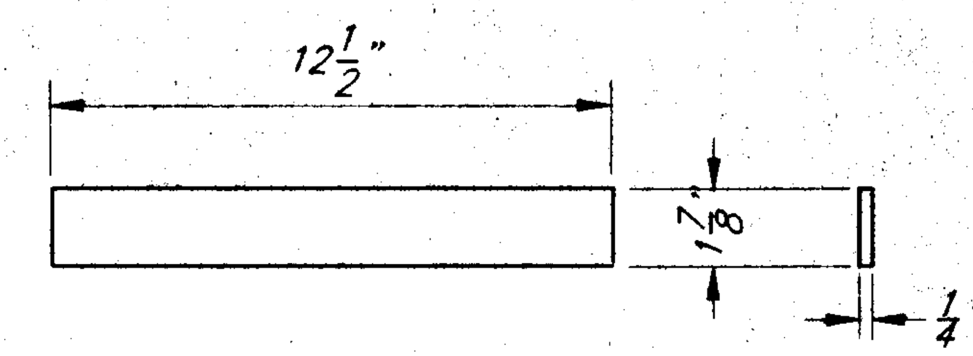
DESIGNED BY: FHWA
DRAWN BY:
PROJECT NO. 71372
DATE:



STRUCTURAL TUBE DETAIL

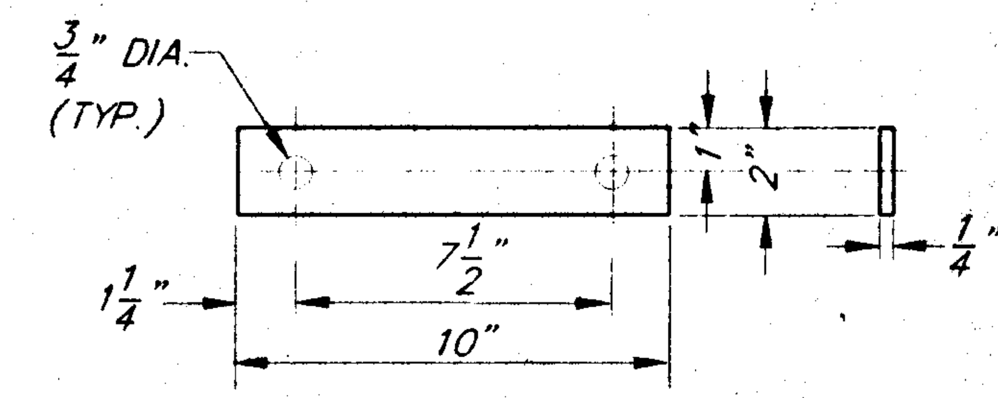


ANGLE DETAIL

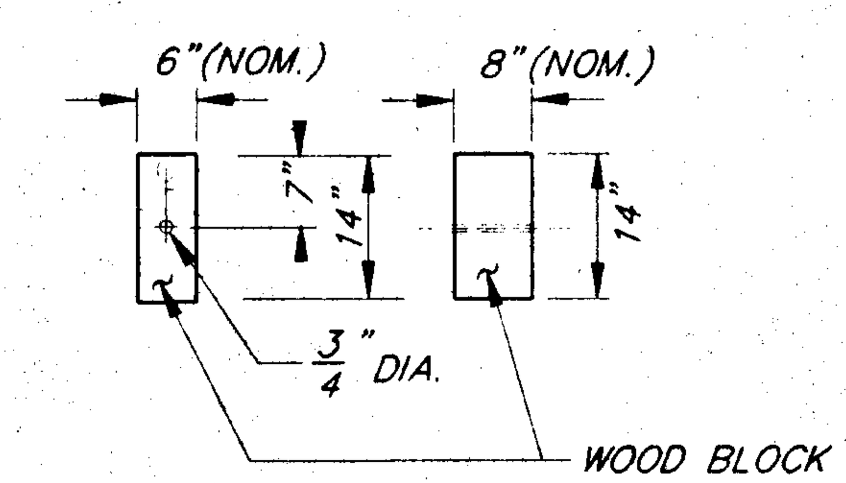


STEEL PLATE DETAIL

(4 REQUIRED)

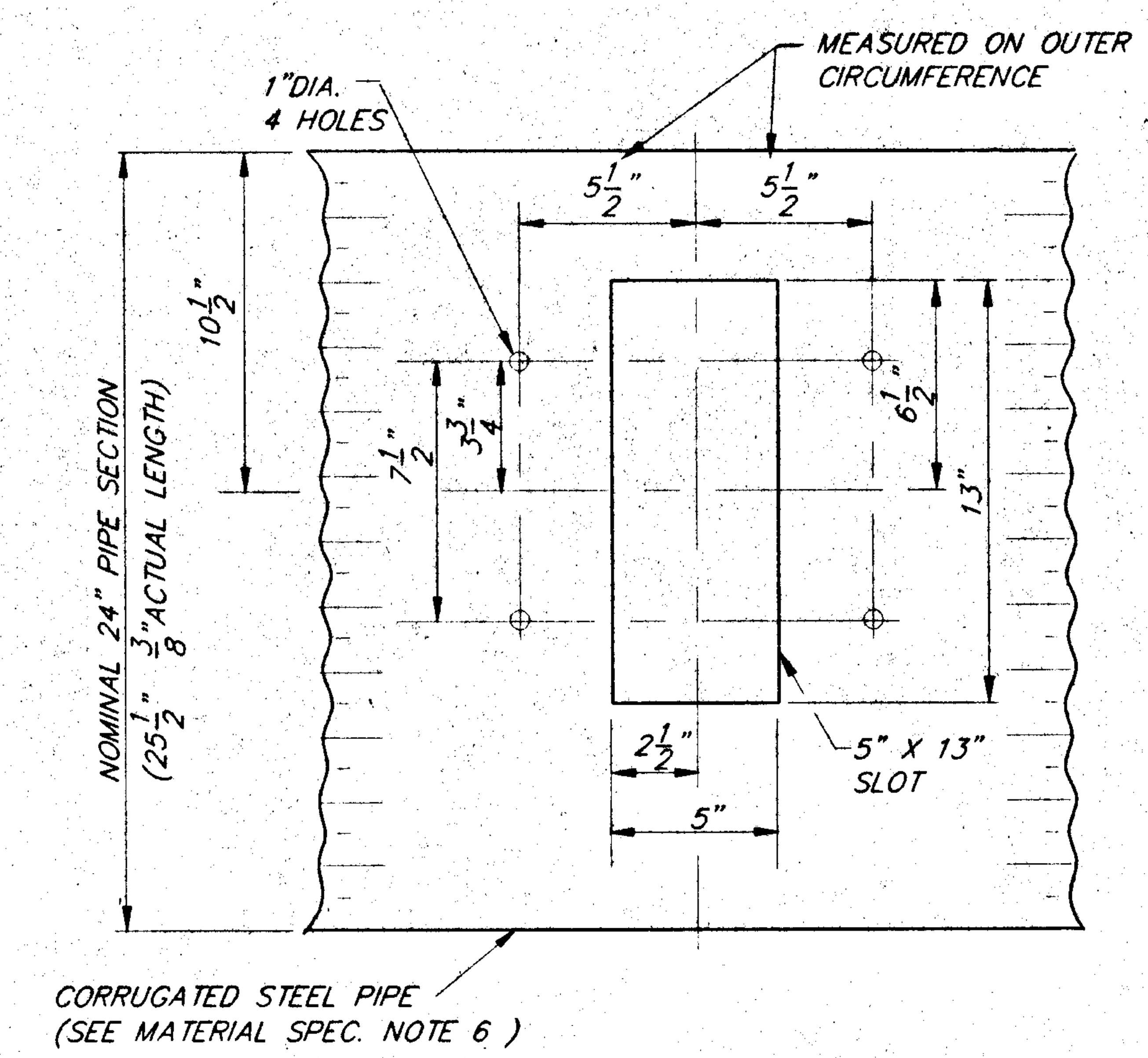


STEEL PLATE WASHER DETAIL



WOOD BLOCK B DETAIL

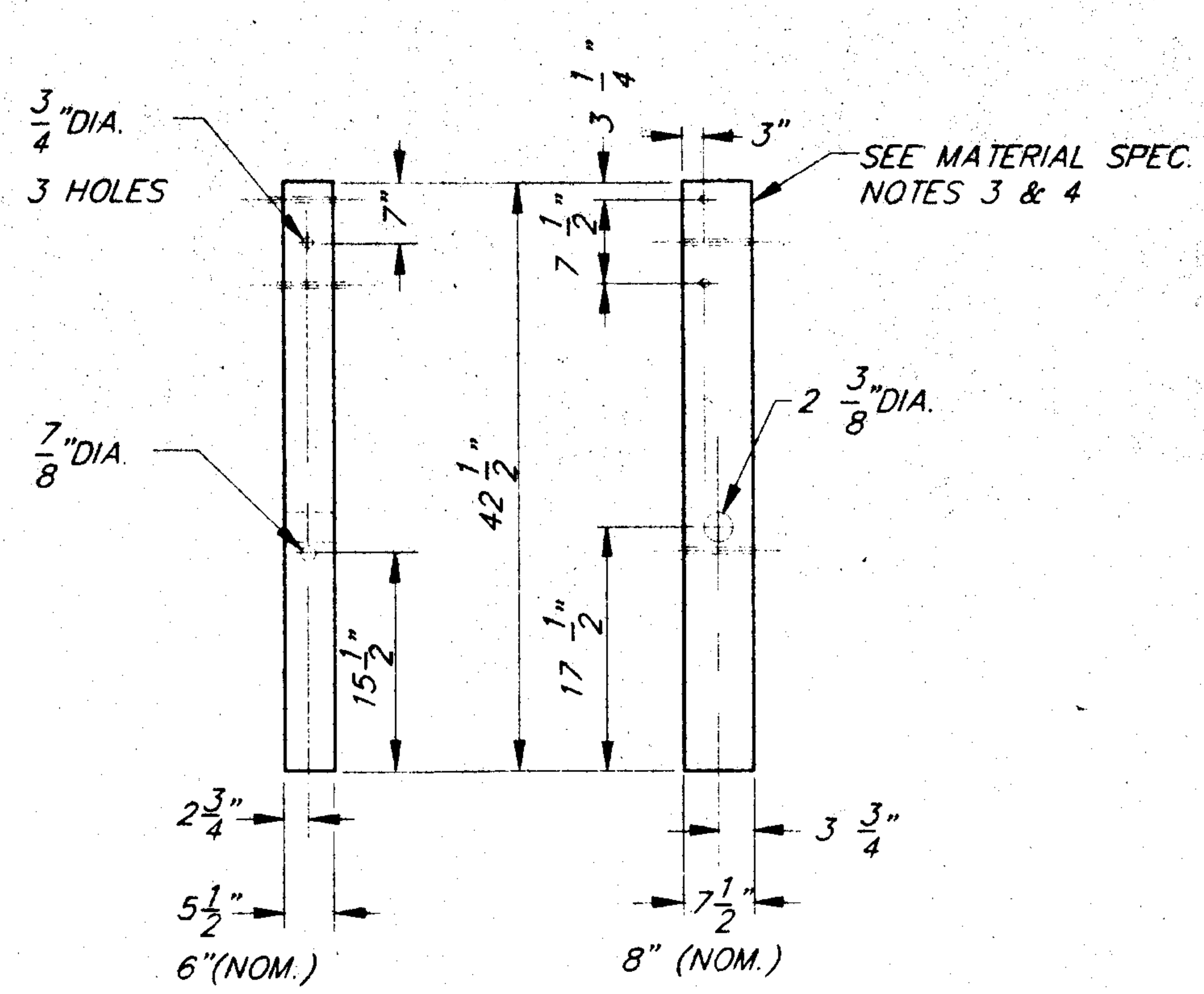
(4 REQ'D.)



CORRUGATED STEEL PIPE DETAIL

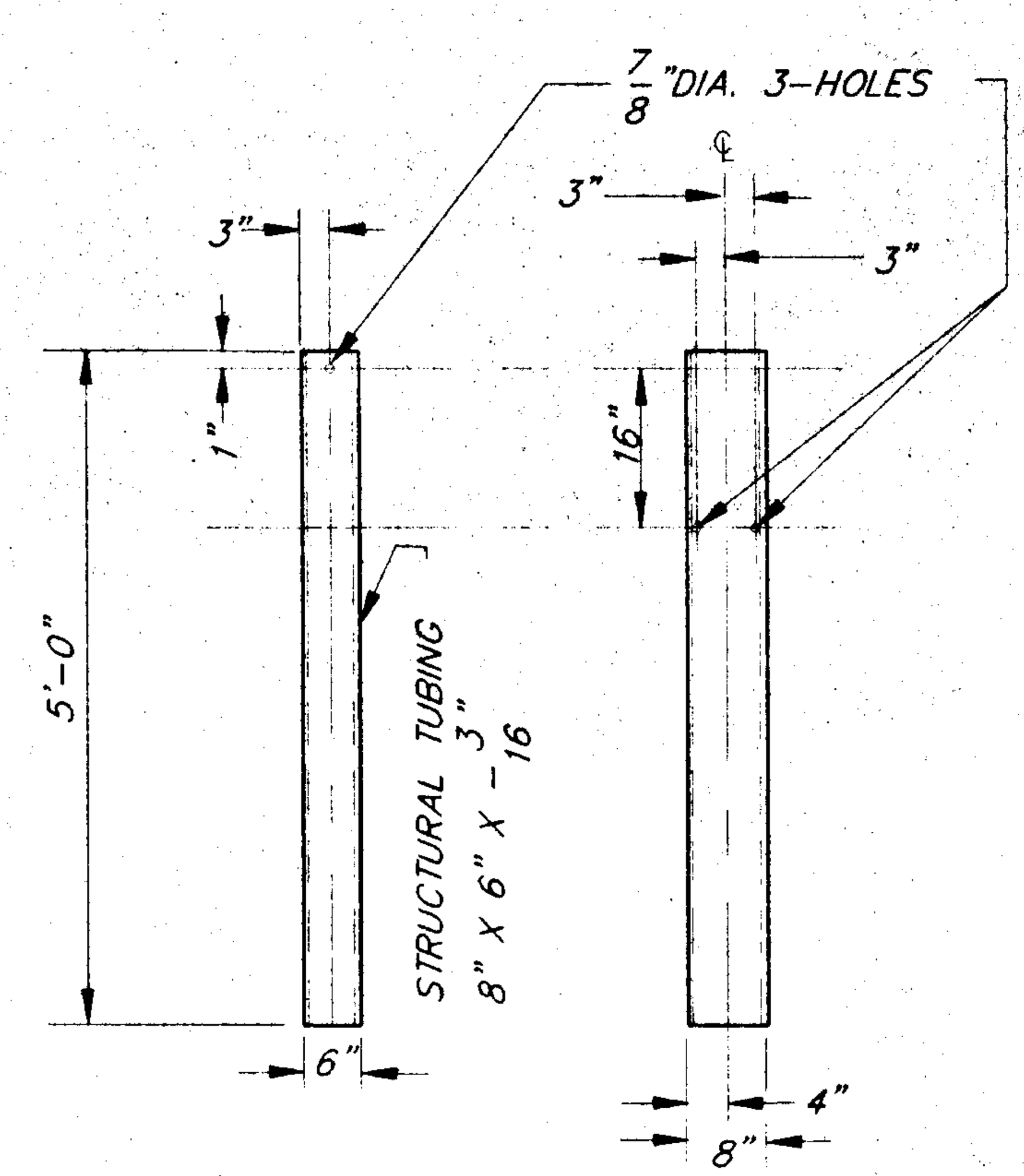
MATERIAL SPECIFICATIONS NOTES:

1. ALL BOLTS SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. A307 AND NUTS TO THE REQUIREMENTS OF A.S.T.M. A563, GRADE A OR BETTER.
2. ALL BOLTS AND NUTS SHALL BE GALVANIZED IN ACCORDANCE WITH A.S.T.M. A153.
3. WOOD POSTS SHALL BE MADE OF S4S TIMBER WITH A STRESS GRADE OF 1200 PSI OR BETTER FOR WET USE CONDITION, IN ACCORDANCE WITH WEST COAST LUMBER INSPECTION BUREAU (W.C.L.I.B.) GRADING RULES.
4. ALL WOOD POSTS AND BLOCKS SHALL RECEIVE PRESERVATIVE TREATMENT IN ACCORDANCE WITH A.A.S.H.T.O. DESIGNATION M-133 AND AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (A.I.T.C.) TREATMENT STANDARD 109-69. RETENTION SHALL BE MEASURED BY ASSAY AND SHALL BE DETERMINED FOR GROUND CONTACT CONDITION FOR TIMBER POST AND PRESERVATIVE MATERIAL SELECTED.
5. ALL ANGLES, CHANNELS AND PLATES SHALL CONFORM TO REQUIREMENTS OF A.S.H.T.O. M-138 AND A.S.T.M. A36 AND STRUCTURAL TUBING TO A.S.T.M. A500 GRADE B OR A501. WELDING SHALL MEET THE CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE A.N.S.I./A.W.S. D1.1. ALL STRUCTURAL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH A153. NO PUNCHING, DRILLING OR WELDING SHALL BE PERMITTED AFTER GALVANIZING WITHOUT APPROVAL OF ENGINEER.
6. CORRUGATED STEEL PIPE SHALL BE HOT DIPPED GALVANIZED 16 GAGE 24" DIA. WITH ANNULAR CORRUGATIONS AND SHALL MEET REQUIREMENTS OF A.A.S.H.T.O. M36 AND M218.



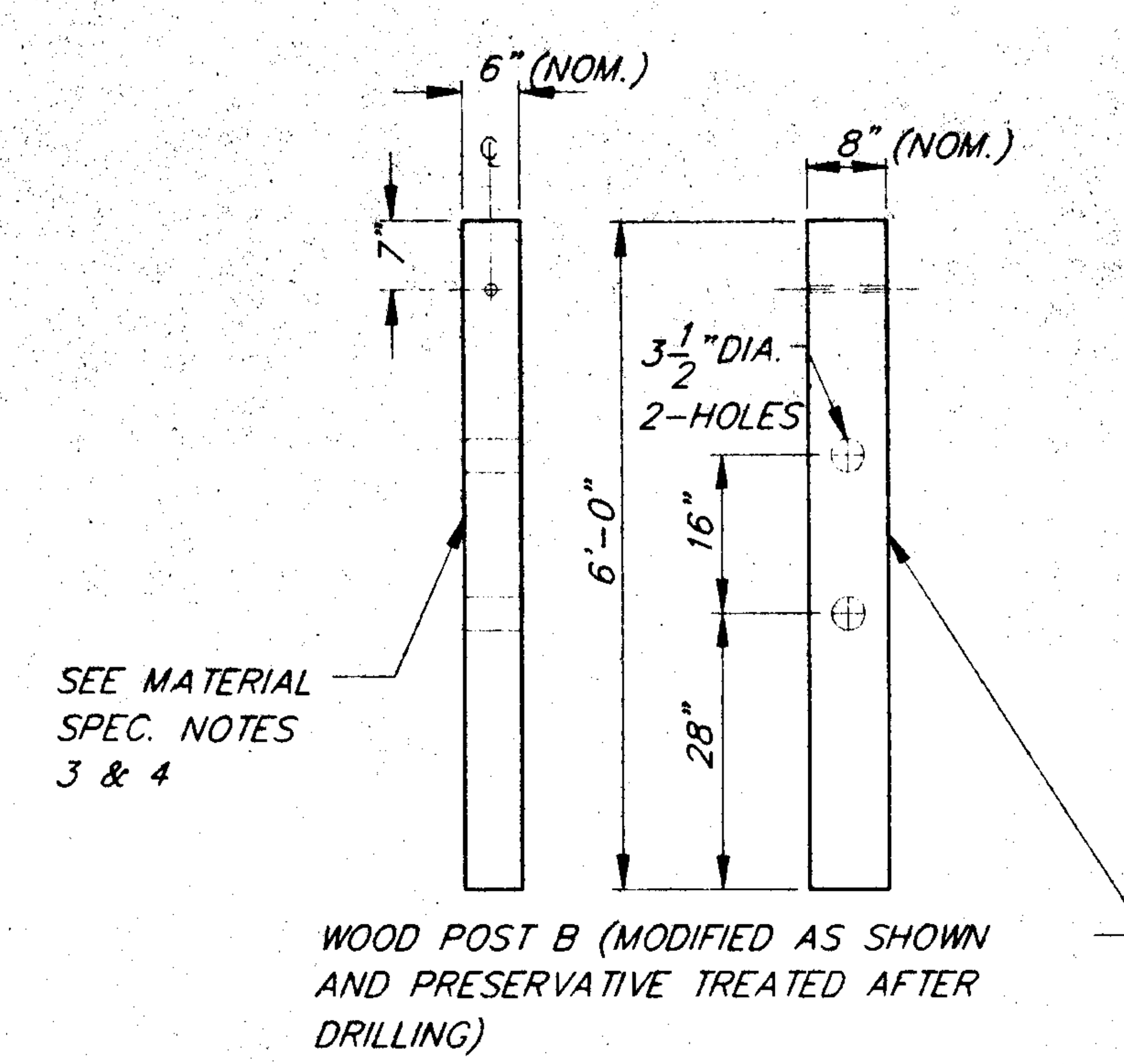
WOOD BREAKAWAY POST A DETAIL

(2 REQ'D.)



STEEL TUBE DETAIL POST A

(2 REQ'D.)



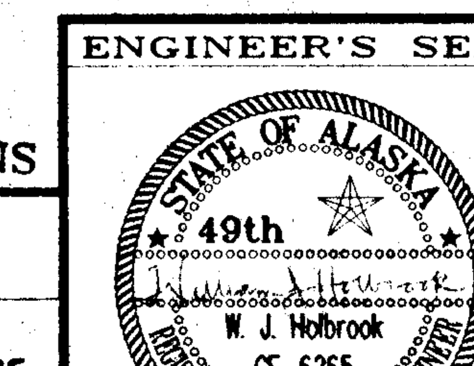
WOOD BREAKAWAY DETAIL POST B

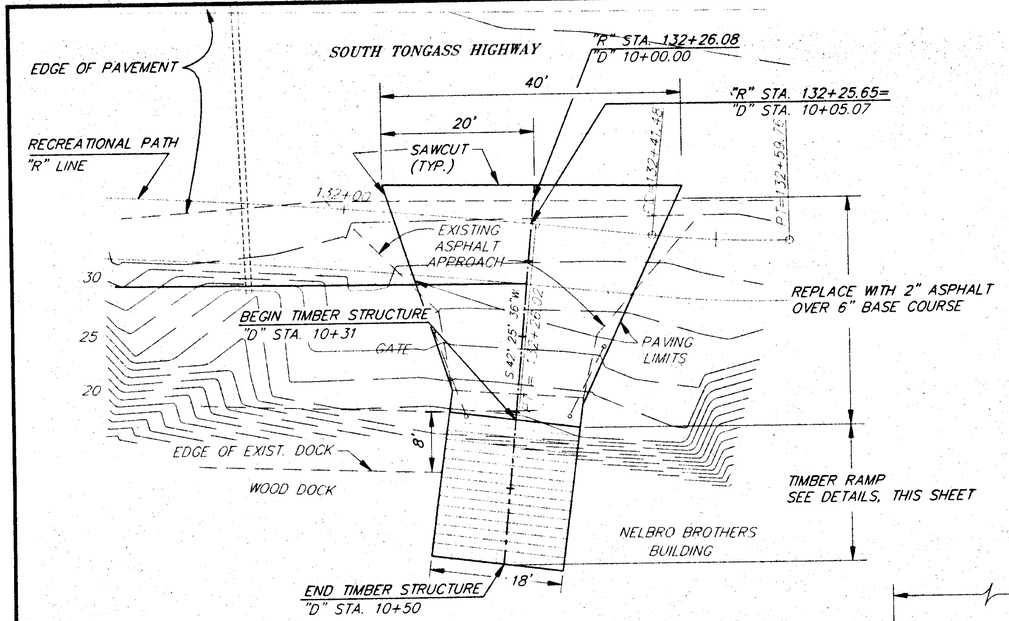
(3 REQ'D.)

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

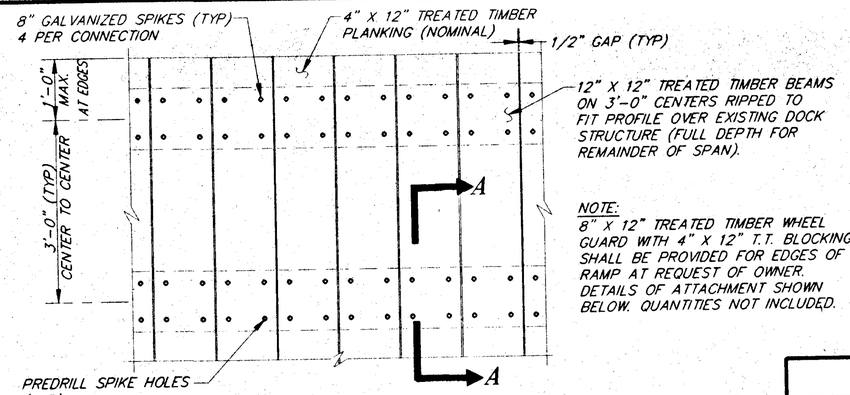
PATH: P:\KTN\71372\DR\-DET2 PLOTF.PCP(1) OR PLOTH.PCP(2)	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION	KETCHIKAN SOUTH TONGASS HIGHWAY COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH PROJECT NO. TE-0902 (18) 71372 ALASKA	DESIGNED BY: FHWA	PROJECT NO. 71372
BY: DATE: DESCRIPTION OF CHANGE:			DRAWN BY:	DATE:

ENGINEER'S SEAL

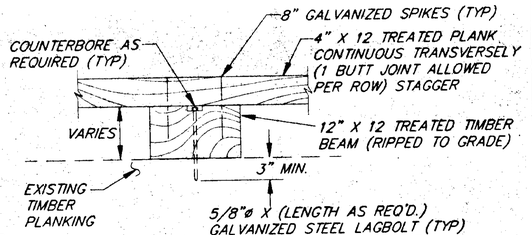




"D" LINE PLAN



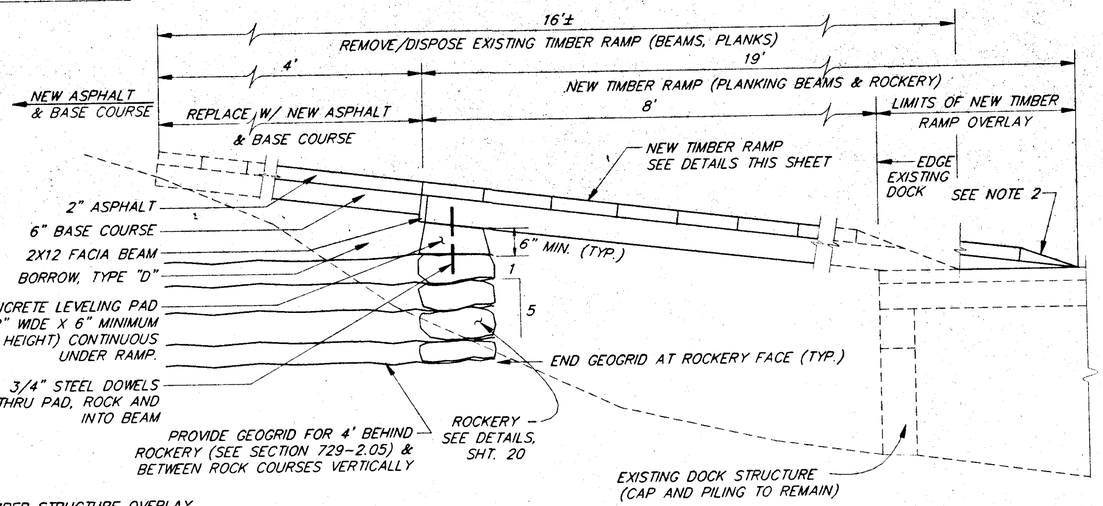
TIMBER RAMP CONSTRUCTION DETAILS



VIEW A-A

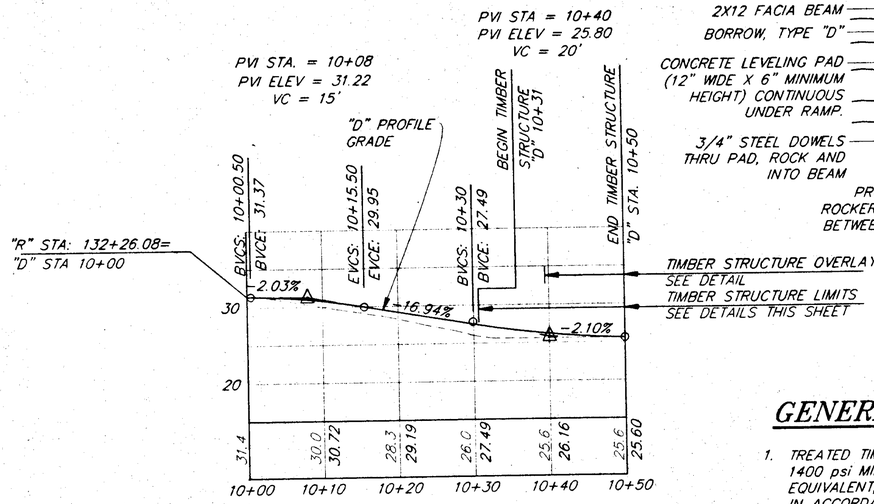
TREATED TIMBER SUMMARY

COMPONENT	SIZE	WIDTH	LENGTH	THOUSAND BOARD FEET (MBM)
PLANKS	4"X12"	12"	18 X 18' = 324'	1.30
BEAMS	12"X12"	12"	6 X 18' = 138'	1.30
			TOTAL =	2.60



TIMBER RAMP PROFILE VIEW

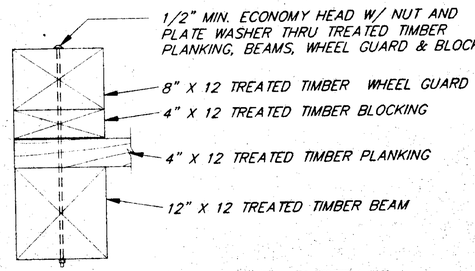
RESIDENTIAL DRIVEWAY TYPICAL RECONSTRUCTION DETAIL



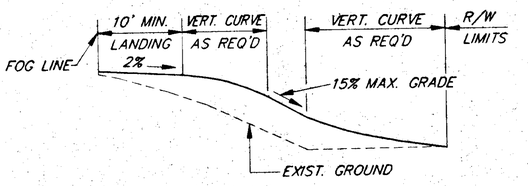
"D" LINE PROFILE
"D" LINE DRIVEWAY DETAILS

GENERAL NOTES:

1. TREATED TIMBER SHALL BE S4S, DOUGLAS FIR ALLOWABLE STRESS = 1400 psi MINIMUM, TREATMENT SHALL BE ACZA PRESERVATIVE OR EQUIVALENT, 0.4 pcf RETENTION BY ASSAY, PENETRATION = 0.4 INCHES IN ACCORDANCE WITH A.W.P.A. C2 STANDARD SPECIFICATIONS.
2. BEVEL LAST PLANK TO MATCH EXISTING GRADE AT OUTBOARD END.
3. FOR DRIVEWAYS, ASPHALT & BASE THICKNESSES, SHALL BE INCREASED TO 2" AND 6" RESPECTIVELY.
4. SEE DRIVEWAY SUMMARY SHT 4 FOR ADDITIONAL INFORMATION.



WHEEL GUARD DETAIL



RESIDENTIAL PROFILE TYPICAL RECONSTRUCTION DETAIL

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
49th
W.J. HOLBROOK

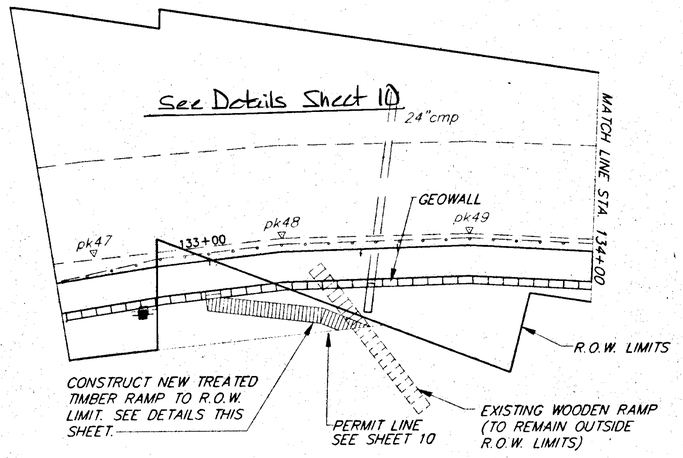
PATH: P:\KIN\71372\DR\-DRIVE PLOT-PCF(10) OR PLOTH.TCF(20)

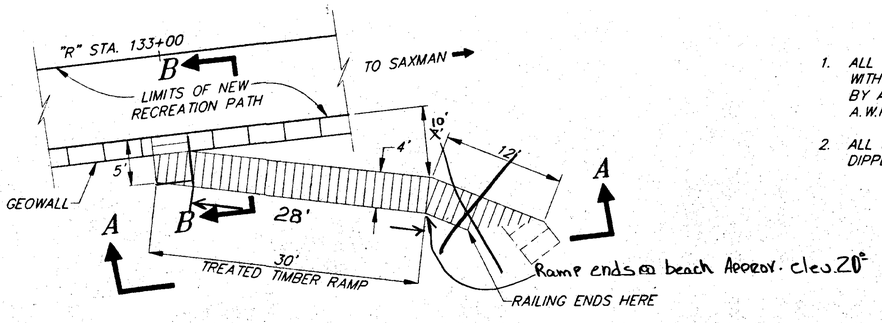
NO.	DESCRIPTION OF CHANGE:	DATE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

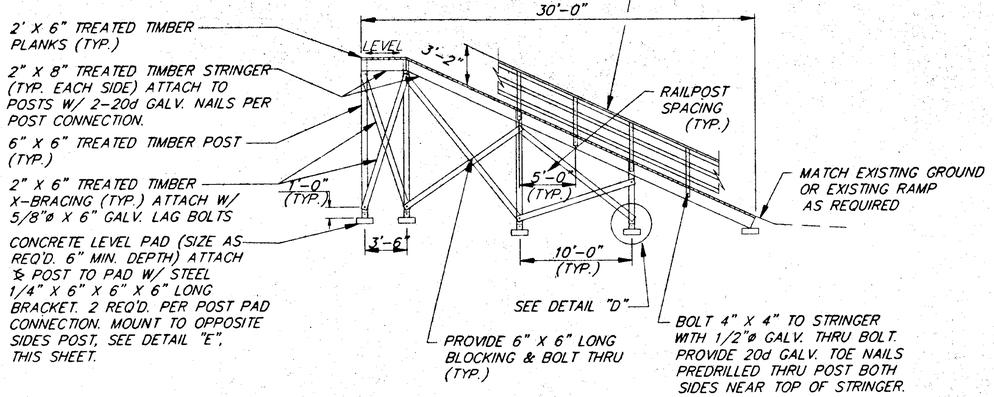
DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY:	DATE:



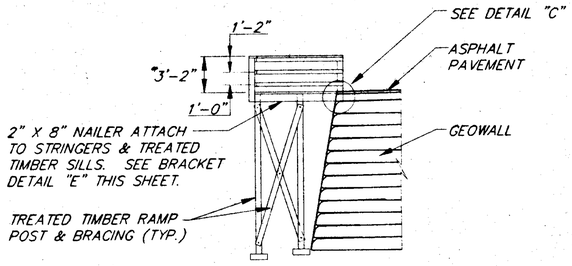


NOTE:
PROVIDE OPENING IN CHAINLINK FENCE FOR ACCESS.

PLAN



ELEVATION VIEW A-A



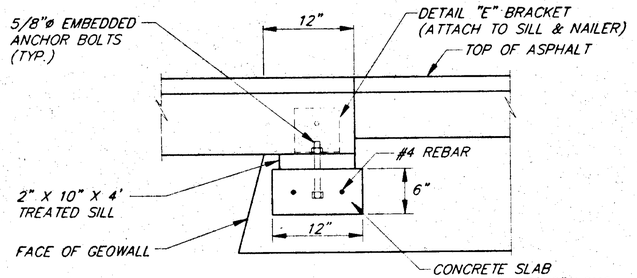
END VIEW B-B

RAMP NOTES:

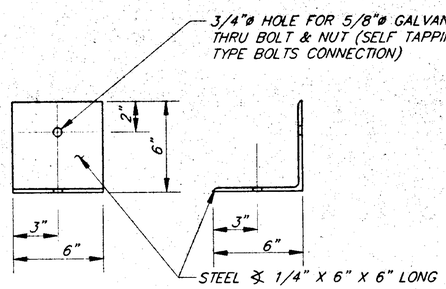
1. ALL TIMBER SHALL BE S4S, 1400 psi ALLOWABLE STRESS MIN., TREATED WITH ACZA OR EQUIVALENT PRESERVATIVE TREATMENT TO 0.4 pcf RETENTION BY ASSAY, 0.4 INCHES PENETRATION, IN ACCORDANCE WITH A.I.T.C. AND A.W.P.A. (C2) STANDARDS, RESPECTIVELY.
2. ALL STRUCTURAL STEEL BRACKETS, BOLTS AND HARDWARE SHALL BE HOT DIPPED GALVANIZED PER ASTM A-153.

RAMP TREATED TIMBER SUMMARY

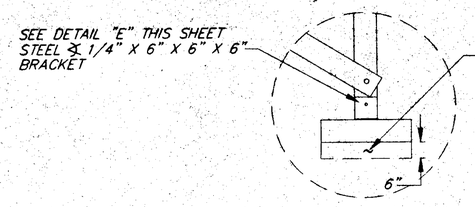
COMPONENT	SIZE	WIDTH	LENGTH	THOUSAND BOARD FEET (MBM)
PLANKS	2" X 6"	6"	79 X 4'+ =328' 12 X 4'	0.33
STRINGERS	2" X 8"	8"	2 X 40'+ =104' 2 X 12'	0.14
POSTS	6" X 6"	6"	10 X 10' =100'	0.30
X-BRACING	2" X 6"	6"	10 X 12' =120'	0.12
HANDRAILING TOPRAIL SIDERAIL	2" X 8" 2" X 4"	8" 4"	44' 44'	0.06 0.03
GUARDRAIL	2" X 4"	4"	2 X 44' =88'	0.06
POSTS	4" X 4"	4"	8 X 4' =32'	0.05
SILL	2"X 10"	10"	4'	0.01
			TOTAL =	1.10



DETAIL "C"



BRACKET DETAIL "E"



NOTE:
FOR NON-ROCK AREAS COMPACT EXISTING GROUND & BORROW, TYPE "E", UNDER PAD.

DETAIL "D"
POST TO PAD CONNECTION

TREATED TIMBER RAMP DETAILS
STA. 133+00

TREATED TIMBER RAMP DETAILS

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL
STATE OF ALASKA
49th
W.J. Holbrook
CE-6265

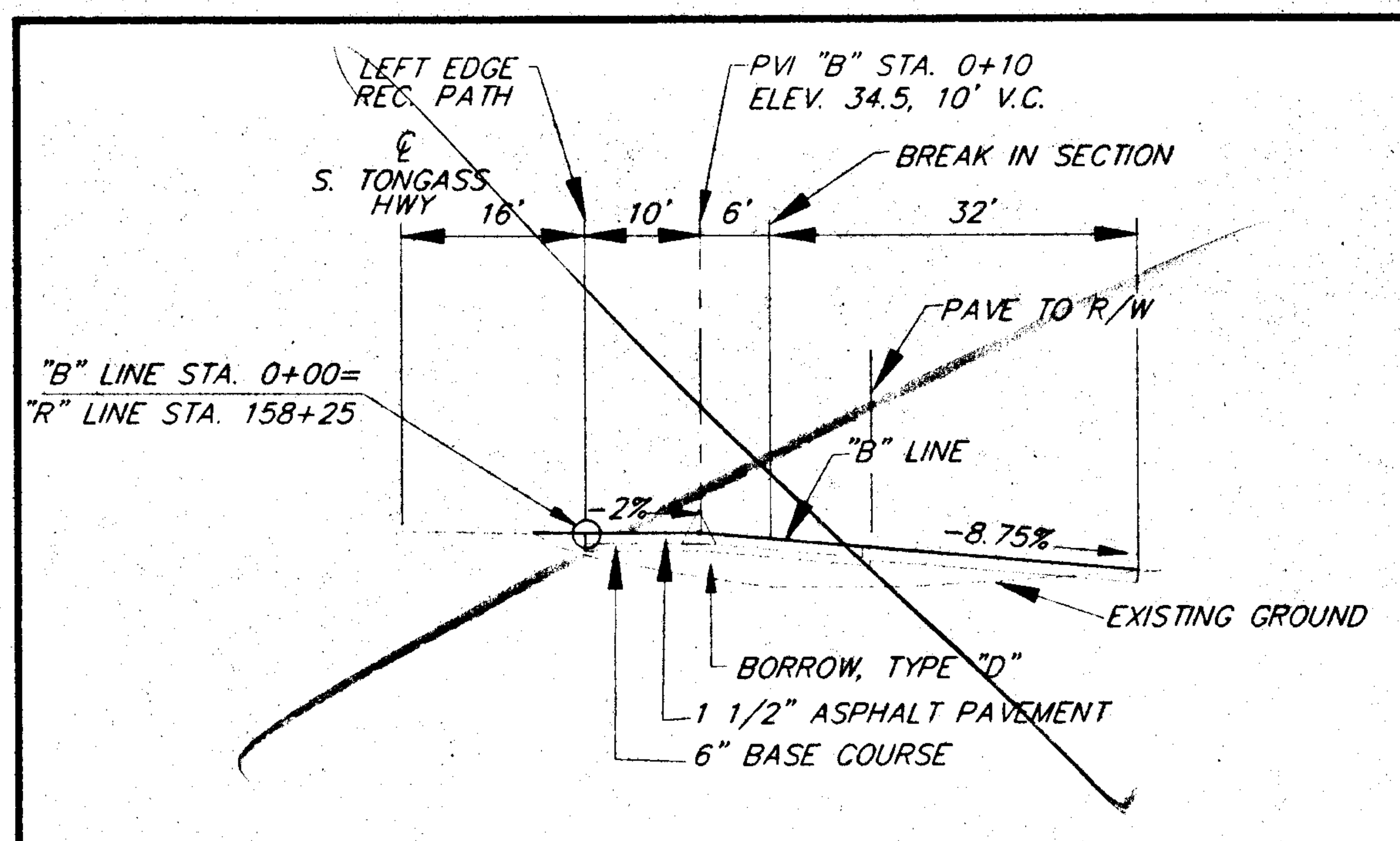
PATH: P:\KTN\71372\DR\-RAMP PLOTF.PCP(20) OR PLOTH.PCP(40)

BY:	DATE:	DESCRIPTION OF CHANGE:

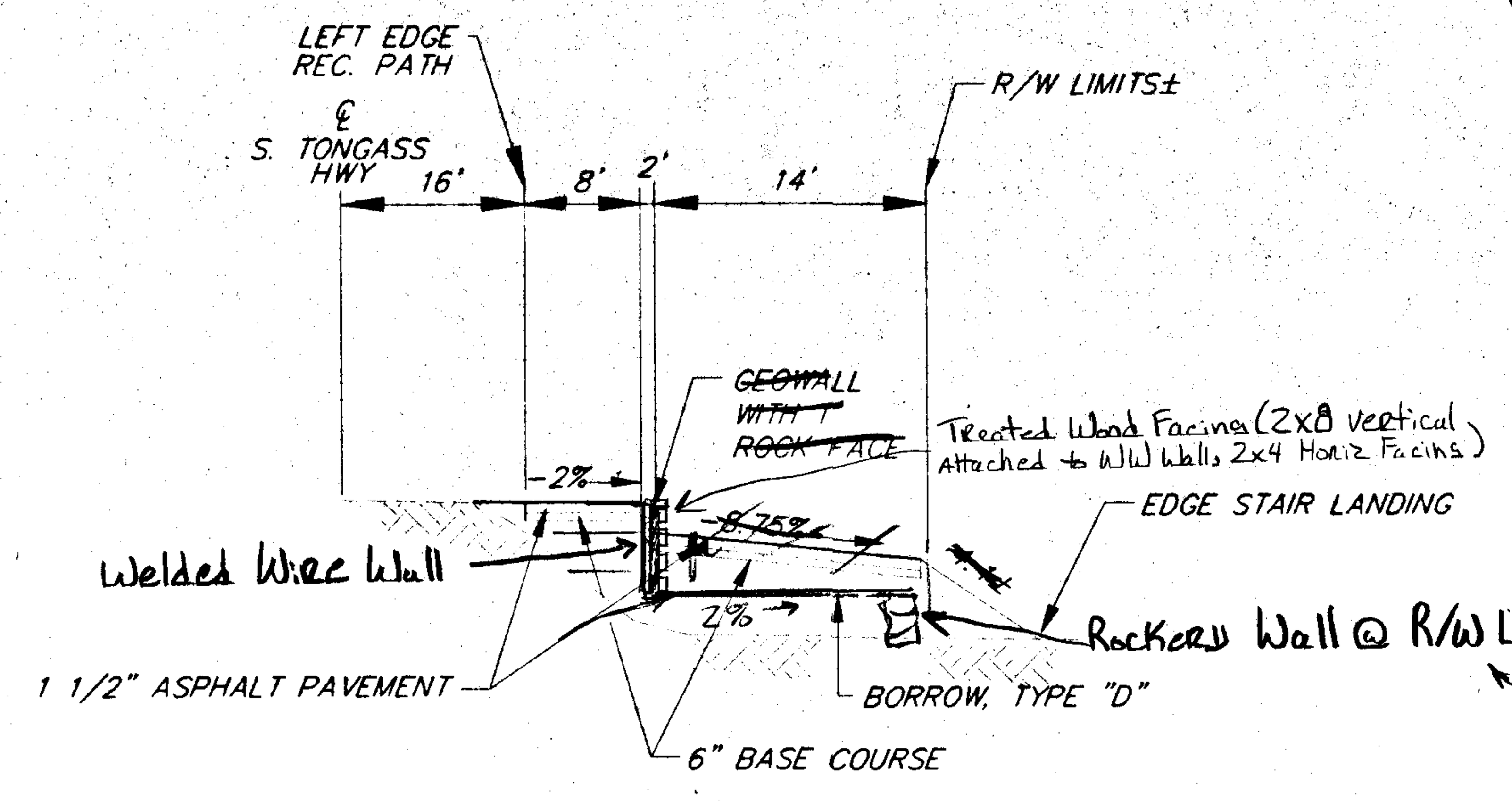
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION

KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

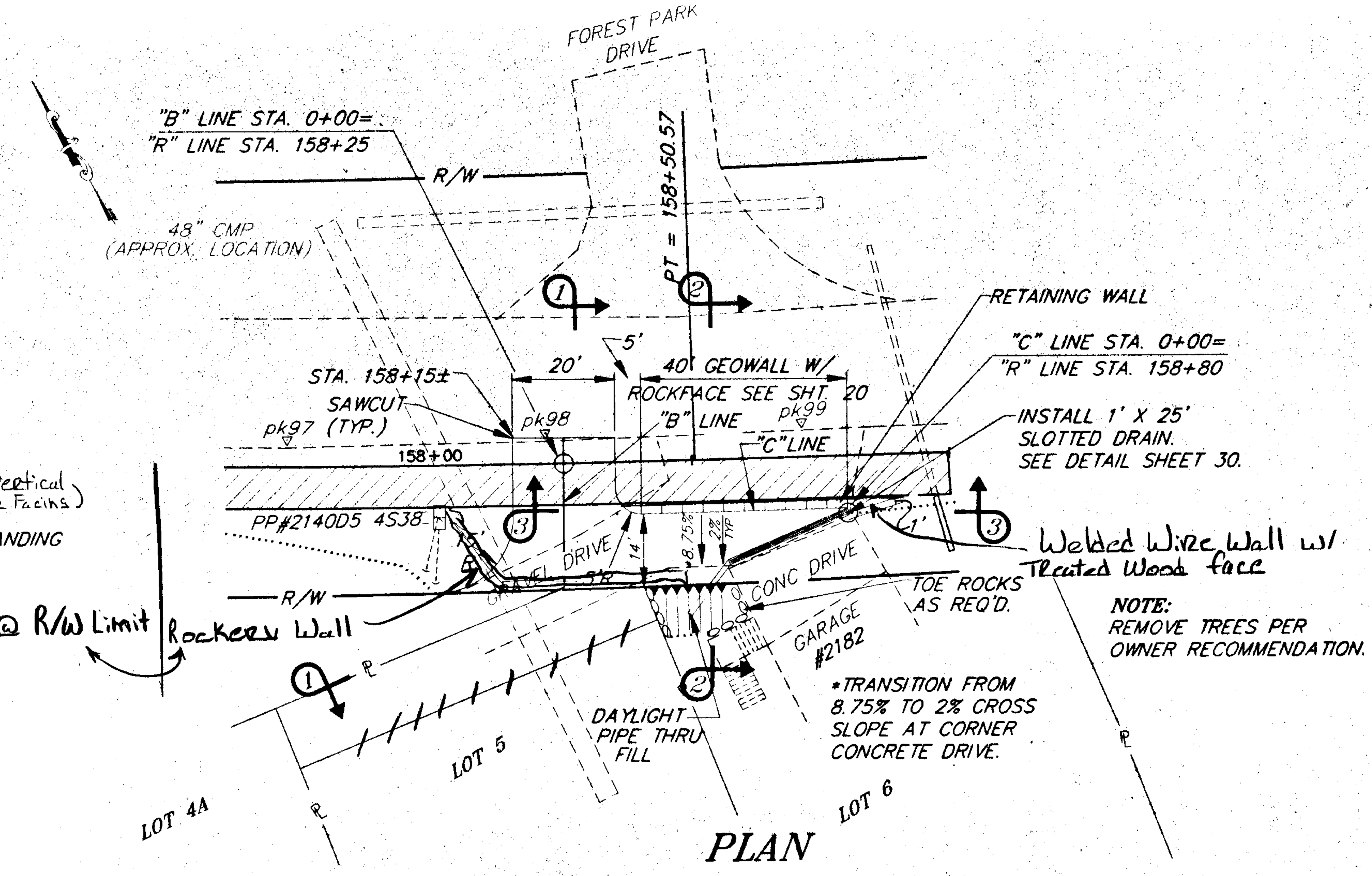
DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY: K. SNYDER	DATE: AUGUST 1995
CHECKED BY: W. HOLBROOK	SHEET NO. 9



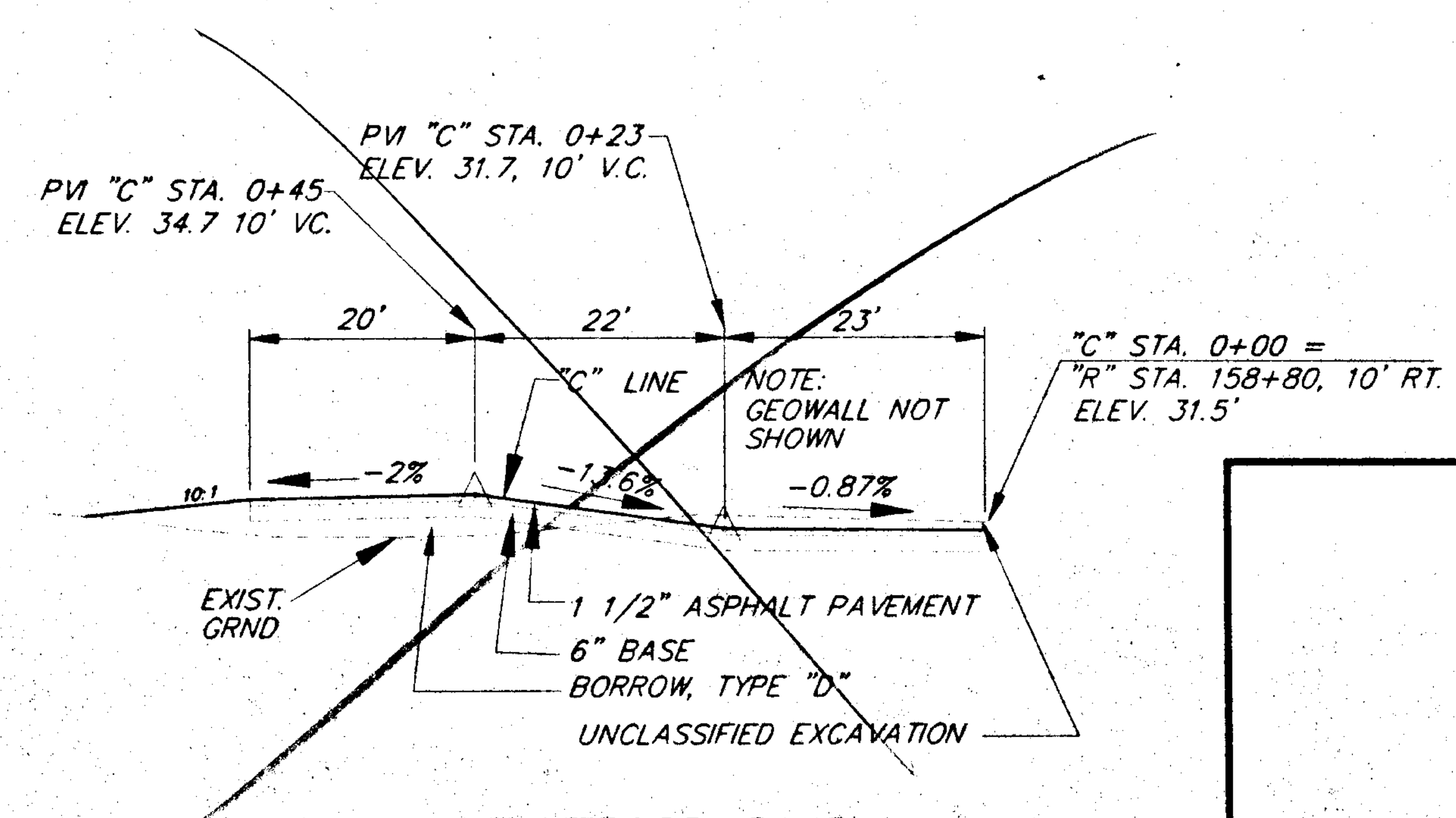
SECTION 1-1



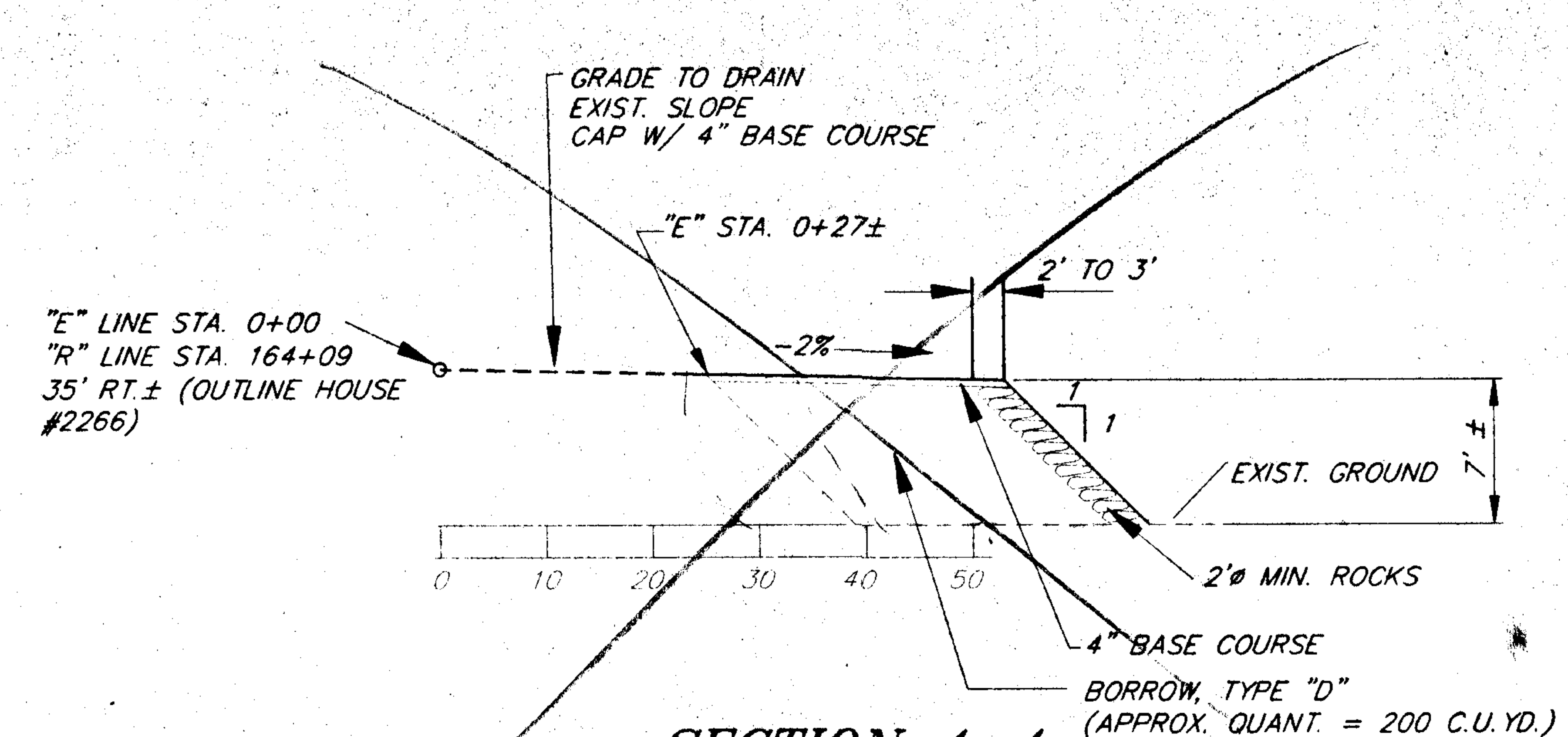
SECTION 2-2



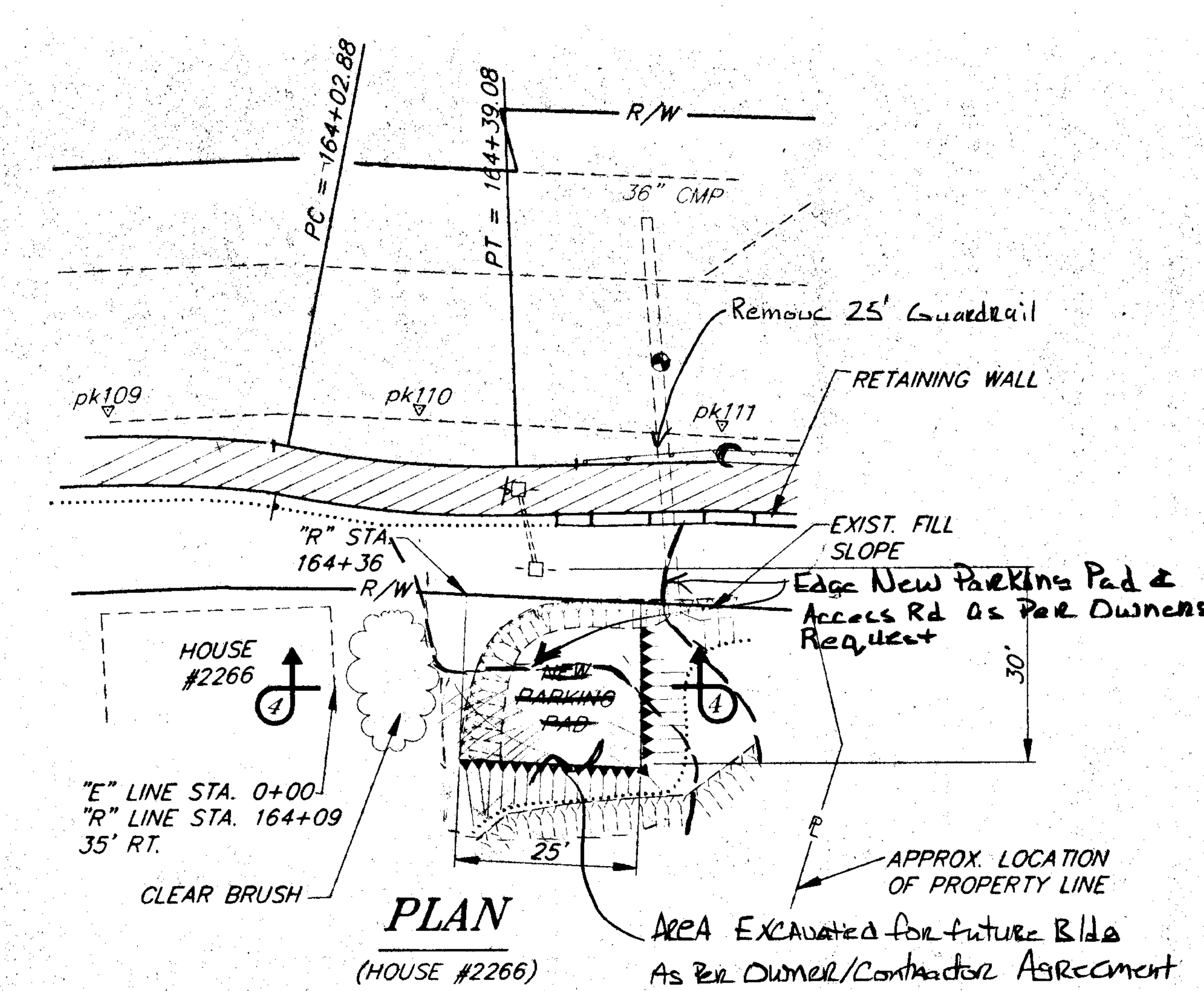
PLAN
(GARAGE #2182)



SECTION 3-3



SECTION 4-4
(HOUSE #2266)



PLAN
(HOUSE #2266)

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH:		
BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

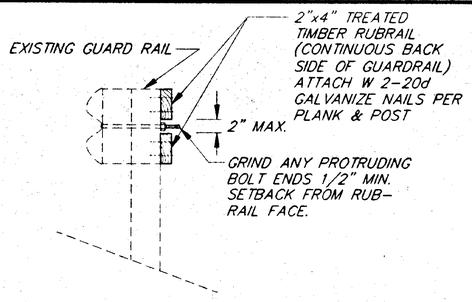
KETCHIKAN — ALASKA
SOUTH TONGASS HIGHWAY
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

PLAN & PROFILES

DESIGNED BY: W. HOLBROOK
DRAWN BY: K. SNYDER
CHECKED BY:

PROJECT NO. 71372
DATE: AUGUST 1995

ENGINEER'S SEAL
STATE OF ALASKA 49th W.J. Holbrook CE-6265 REGISTERED PROFESSIONAL ENGINEER



RUBRAIL NOTES:

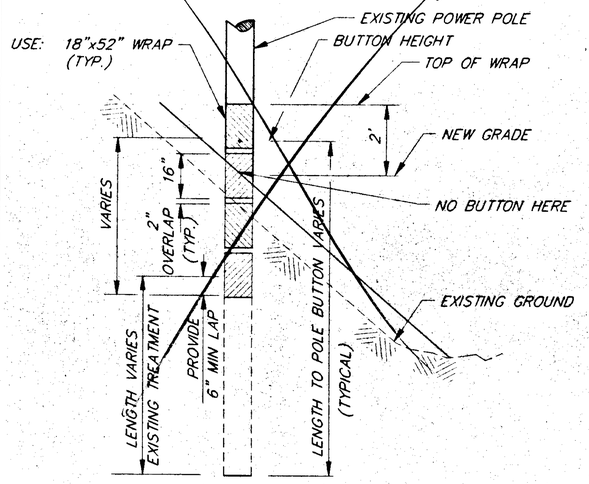
1. TREATED TIMBER MAY BE ROUGH SAWN HEM-FIR OR LARCH, ACZA PRESERVATIVE OR EQUIVALENT TREATED 0.4 PCF RETENTION BY ASSAY IN ACCORDANCE WITH AWPA-C2 STANDARDS MINIMUM BOARD ALLOWABLE STRESS f_b= 1200PSI.
2. 45° BEVEL LEADING AND TRAILING EXPOSED EDGES.
3. RUBRAILS NOT REQUIRED BEHIND GUARDRAIL AT GRAVEL SHIELD LOCATIONS (TYPICAL NO 2-SHT 2).
4. FOR STEEL POSTS, PREDRILL 7/16"ø DIAMETER HOLE IN POST AND RUBRAIL FOR 3/8"ø CARRIAGE OR ECONOMY HEAD BOLT ATTACHMENT (HEAD OF BOLT FACING RECREATION PATH).

RUBRAIL SUMMARY

STATION	TO	STATION	LENGTH (L.A.)	QUANTITY (L.F.)	THOUSAND BOARD FEET (MBM)
112~	"	114+90	290	580	0.77
118+05	"	118+95	90	180	0.24
122+65	"	123+50	85	170	0.23
128+60	"	128+90	30	60	0.08
132+60	"	140+25	765	1530	2.04
144+55	"	151+35	680	1360	1.81
161+55	"	161+90	35	70	0.09
164+50	"	168+70	420	840	1.12
170+80	"	178+10	730	1460	1.95
			TOTAL LF	= 6,250	= 8.33 MBM

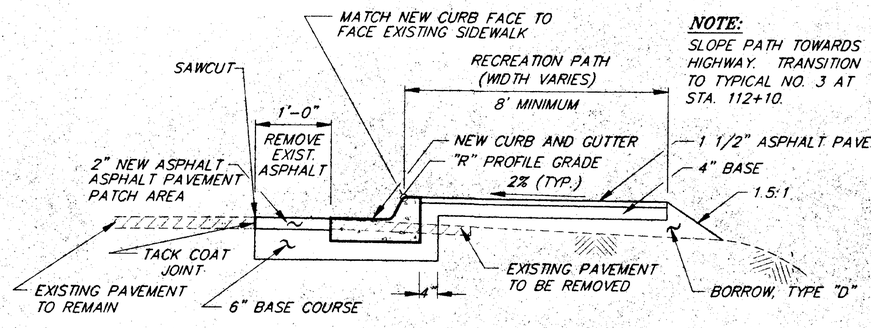
TREATED TIMBER RUBRAIL ELEVATION DETAIL

Deleted as Per KPU directions



UTILITY POLE PROTECTION WRAP DETAIL

RUBRAIL DETAILS

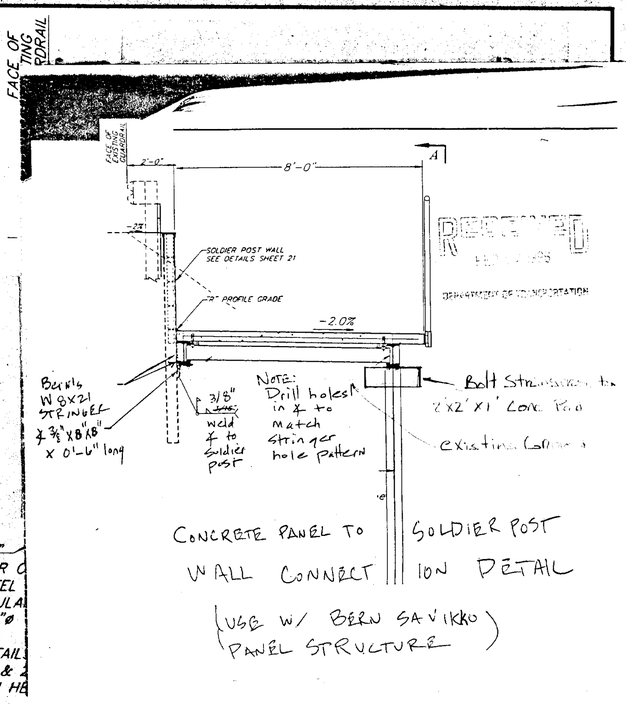


NOTE: SLOPE PATH TOWARDS HIGHWAY. TRANSITION TO TYPICAL NO. 3 AT STA. 112+10.

SAWCUT DETAIL AT CURB AND GUTTER INSTALLATION BOP STA. 109+89 TO STA. 112+10

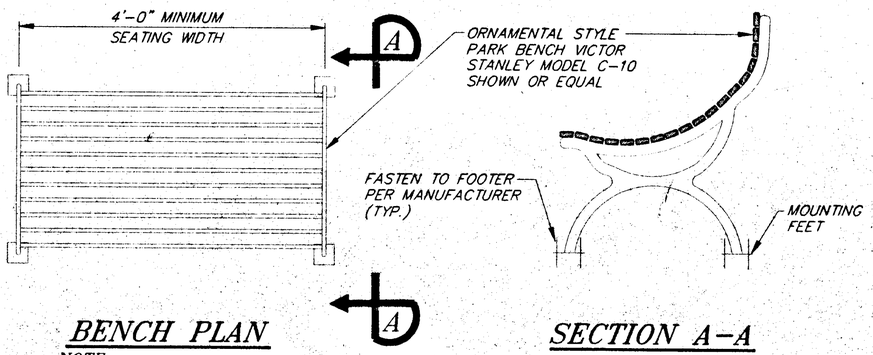
(SEE PLANS SHEET NO. 6)

5 1/8"X 10'-6" TREATED TIMBER C... BOLTED TO STEEL ANGLE AND GLULA... PANEL W/ 5/8"ø ECONOMY HEAD BOLTS PER DETAIL ON SHEETS 21 & 2... AND AS SHOWN HE...



Concrete Panel ~~GLULAM PANEL~~ TO SOLDIER POST WALL CONNECTION DETAIL

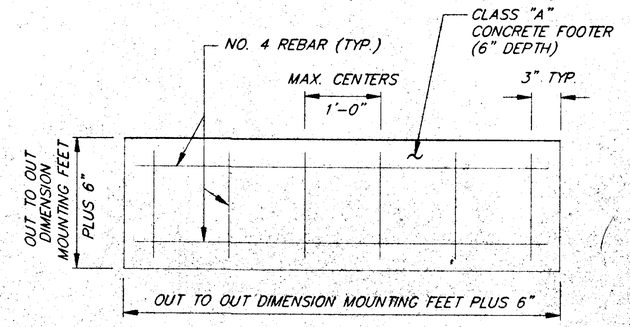
SEE TYPICAL NO. 2/3, SHT 3



BENCH PLAN

NOTE: FOOTING NOT SHOWN

SECTION A-A



CONCRETE FOOTER DETAILS

BENCH CRITERIA AT TURNOUTS

STATION	TO	STATION	NO. BENCHES	LONGITUDINAL SPACING	ORIENTATION
					Parallel to Path ℄
138+90		139+15	2	15'	~~FACING EACH OTHER 90° TO PATH ℄~~
144+50		146+50	4	50'	PARALLEL TO PATH ℄

BENCH NOTES:

1. INSTALL BENCHES PER SPACING AND ORIENTATION CRITERIA IN TABLE. LOCATE BENCHES A MINIMUM OF 5' OFFSET FROM OUTBOARD EDGE OF 8' RECREATION PATH.
2. FASTEN TO CONCRETE FOOTER SHOWN PER MANUFACTER RECOMMENDATIONS.
3. SEE PLANS FOR LOCATIONS.

BENCH DETAILS

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH:

BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

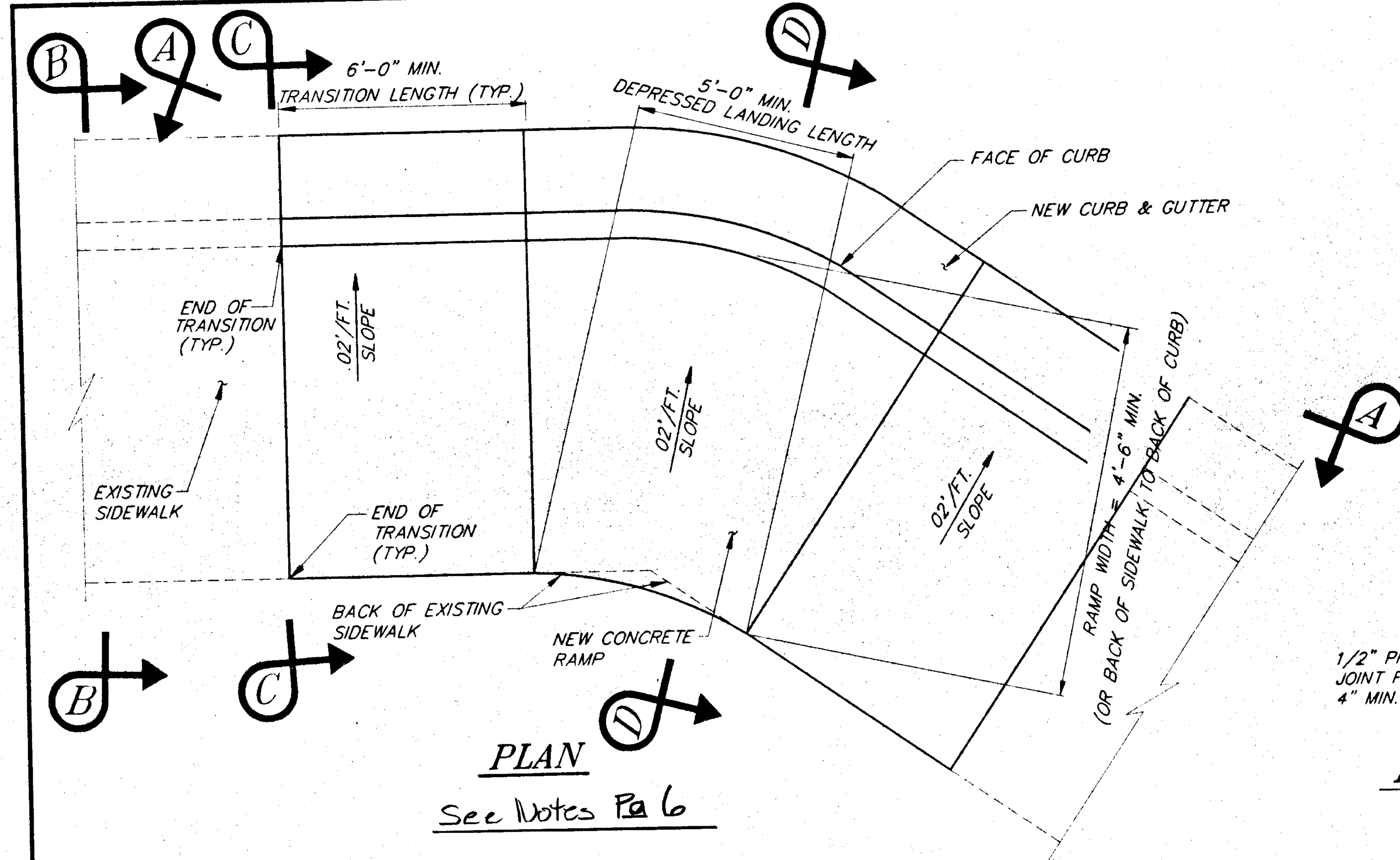
KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY:	DATE:

ENGINEER'S SEAL
STATE OF ALASKA 49th
W.J. Holbrook

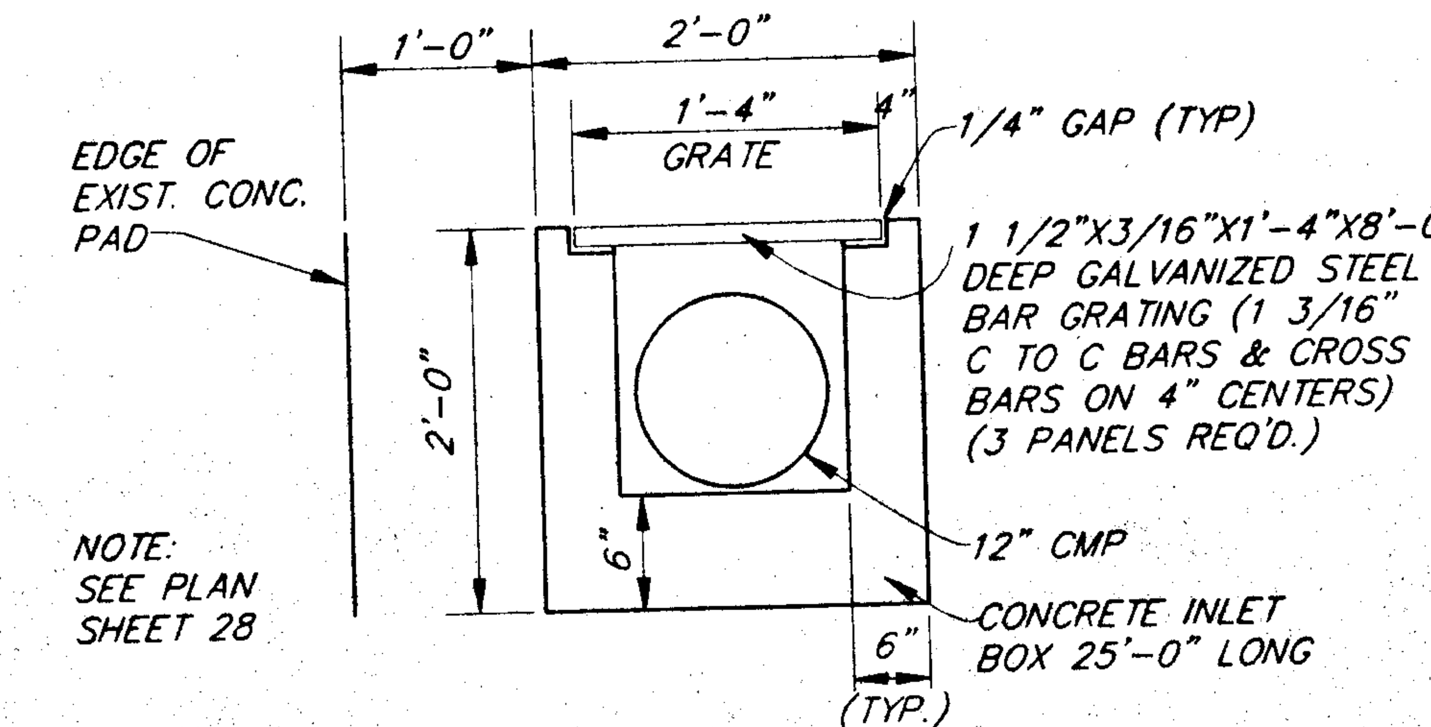
WHEELCHAIR RAMP NOTES:

1. SEE SAWCUT, PAVEMENT PATCHING AND SIDEWALK CONSTRUCTION DETAIL, SHEET 29 FOR ADDITIONAL DETAILS.
2. PROVIDE EXPANSION JOINTS AT ENDS OF TRANSITION AREAS AND DEPRESSED LANDING AREAS. SEE EXPANSION JOINT DETAIL THIS SHEET AND STANDARD DRAWING I-20.11 FOR ADDITIONAL DETAILS.
3. SUBSTITUTE CONCRETE PAVEMENT FOR ASPHALT SHOWN ON DETAIL REFERENCED FROM NOTE 1 ABOVE. ALL OTHER DETAILS THE SAME.
4. BROOM FINISH CONCRETE.



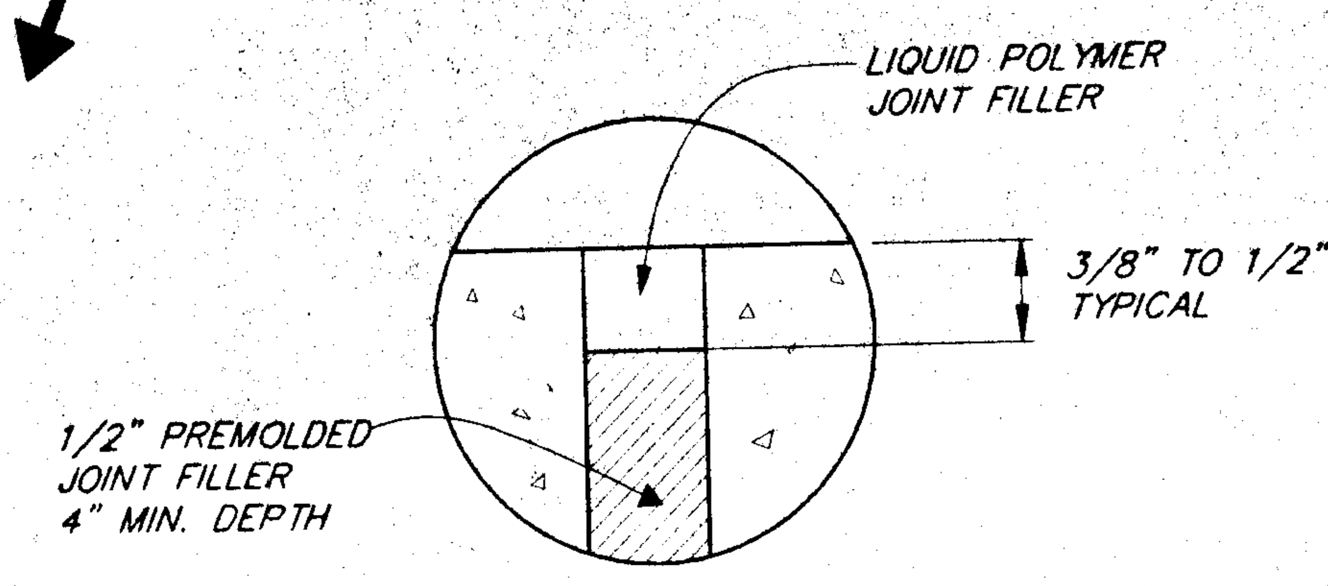
PLAN

See Notes Pg 6

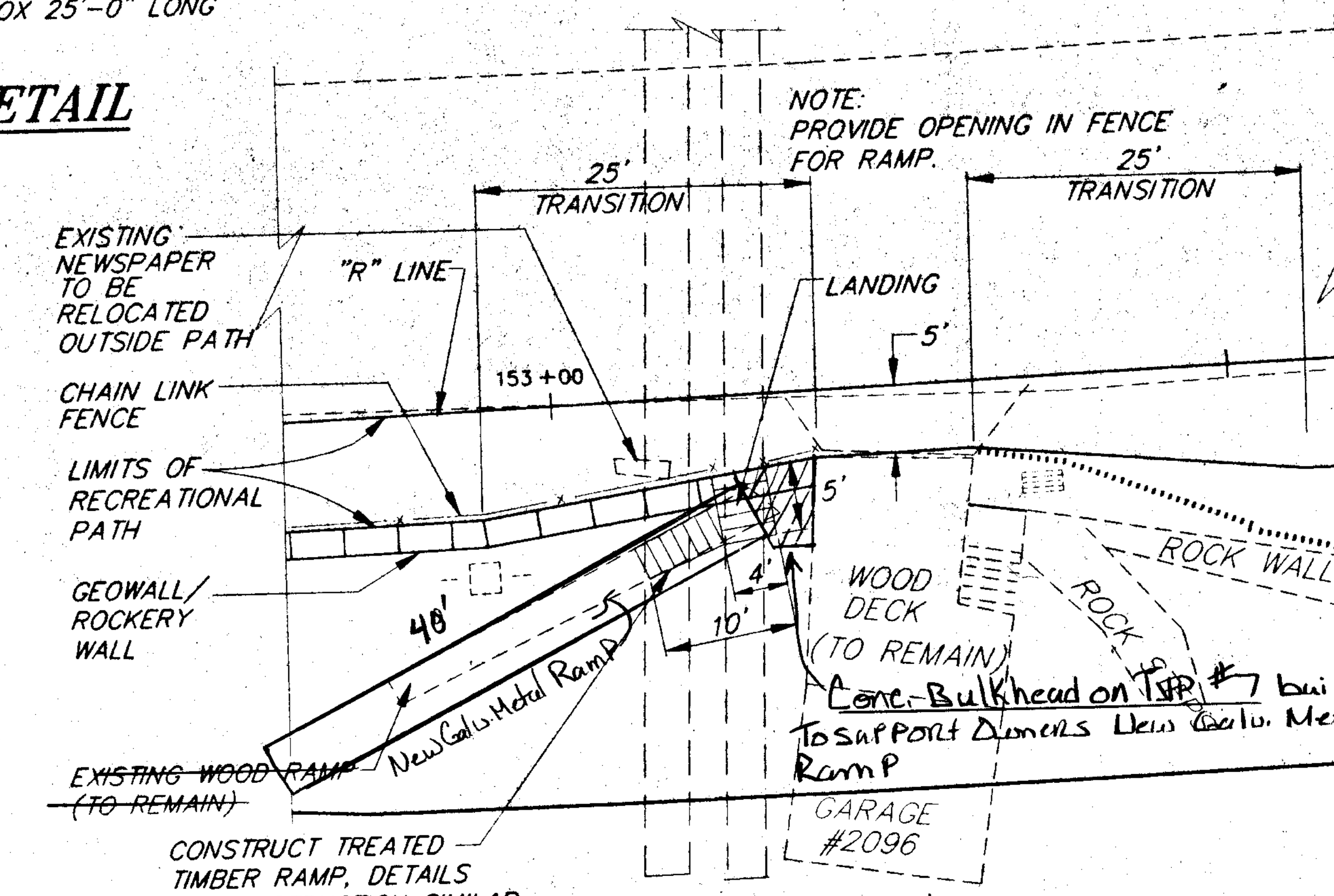


SLOTTED DRAIN DETAIL

(GARAGE # 2182)

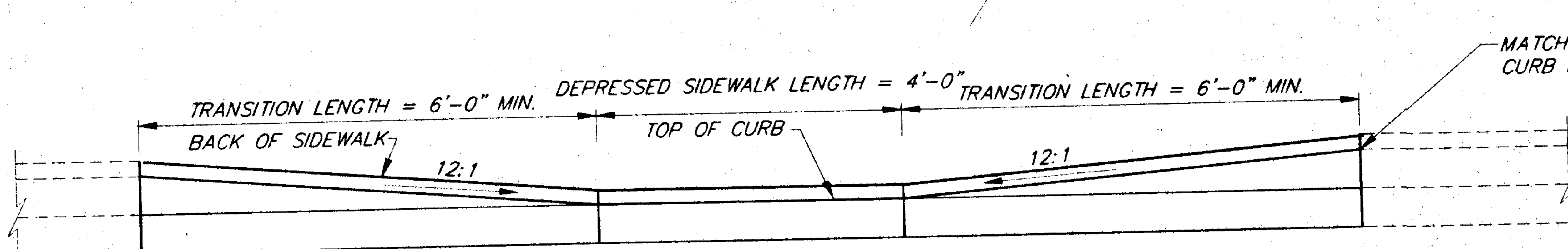


EXPANSION JOINT DETAIL

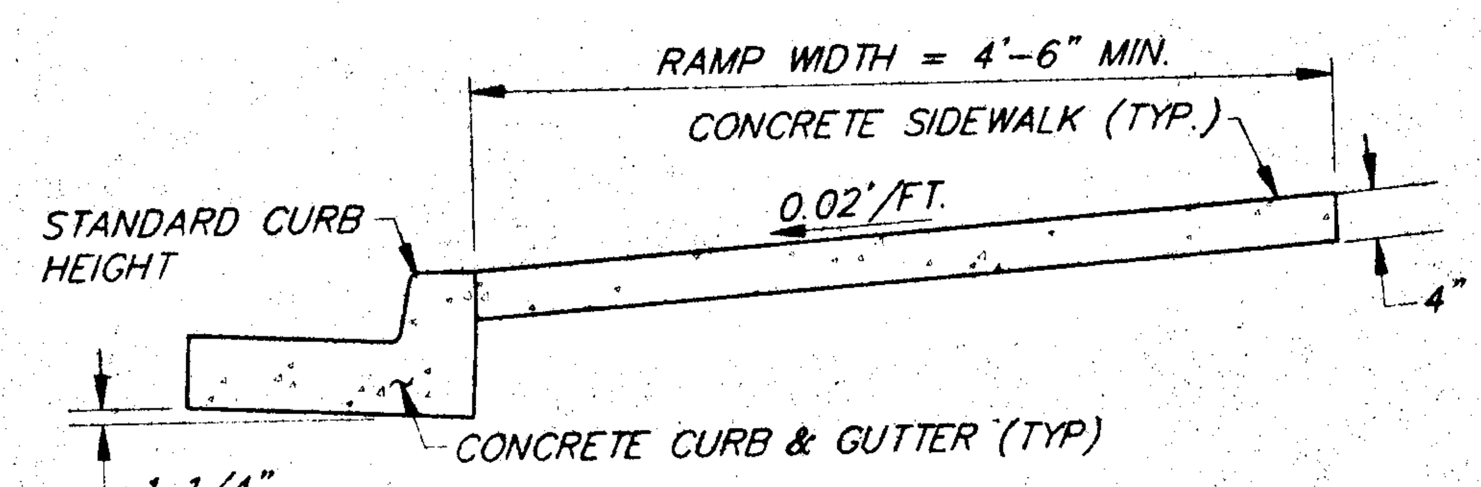


RAMP PLAN

AT STA. 153+15

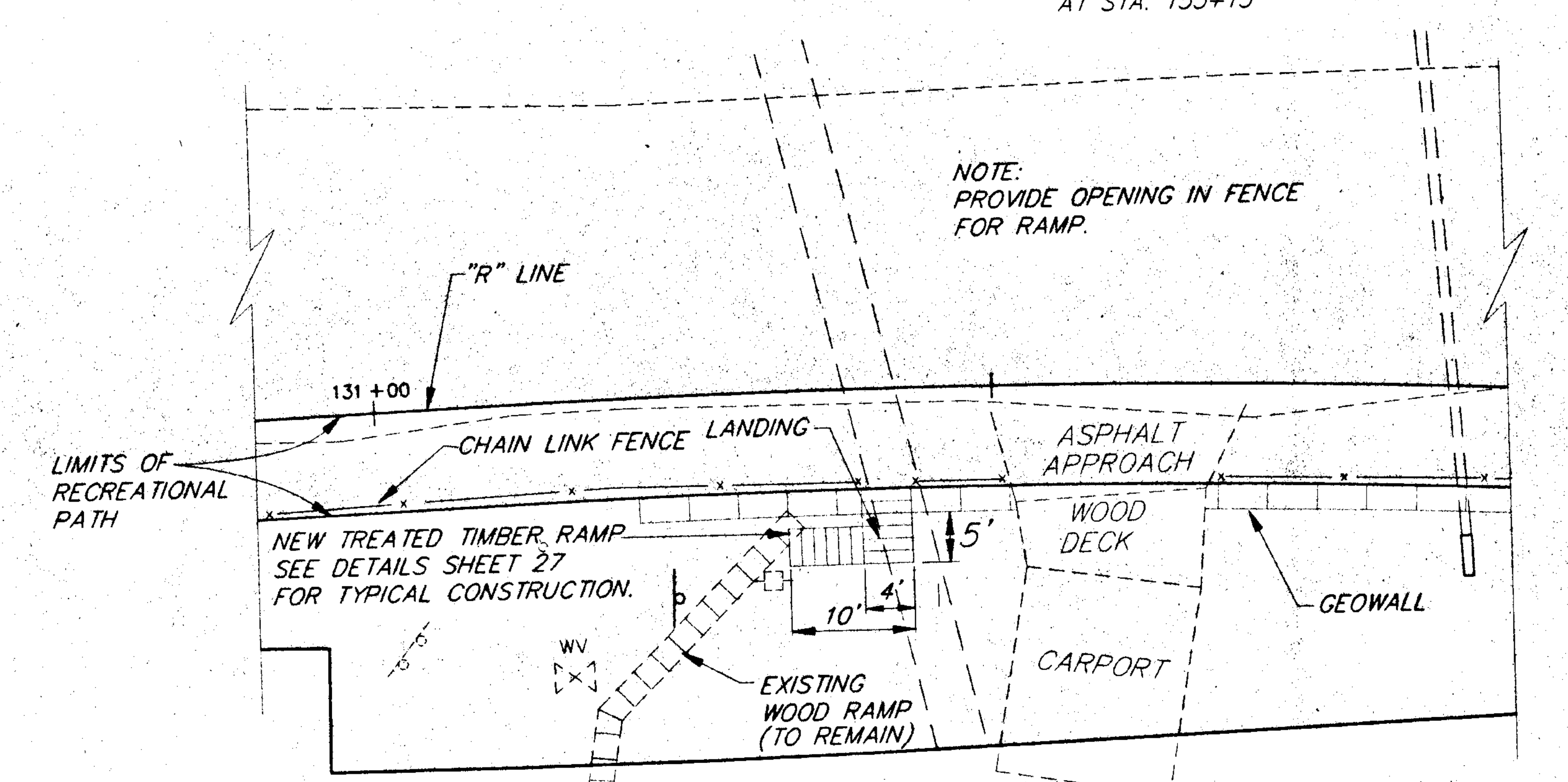


ELEVATION VIEW A-A - WHEELCHAIR RAMP DETAILS



SECTION VIEW B-B

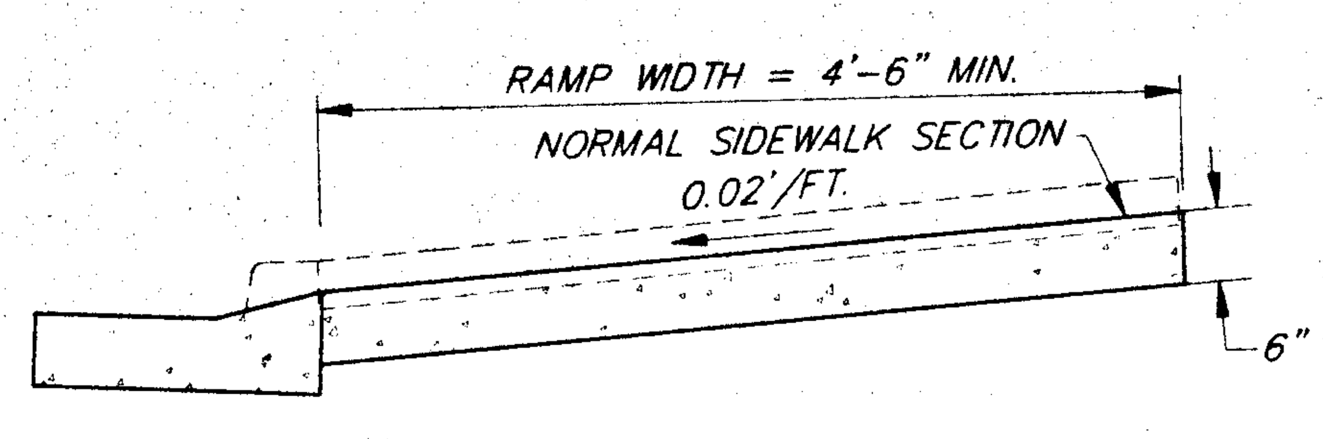
(NORMAL SIDEWALK SECTION)



See Change Order #2, line change for New Path alignment, Carport & Ramp Plan

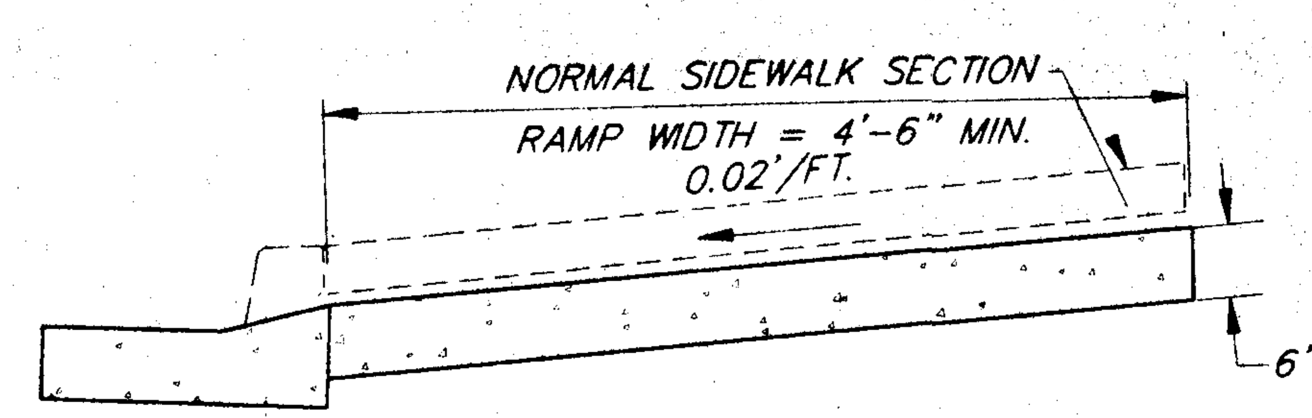
RAMP PLAN

AT STA. 131+40



SECTION VIEW C-C

(TRANSITION AREA)



SECTION VIEW D-D

(DEPRESSED LANDING CURB & SIDEWALK)

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

ENGINEER'S SEAL: STATE OF ALASKA 49th W.J. Holbrook

PATH: P:\KTN\71372\DR\-DE16 PLOTF.PCP(1) OR PLOTH.PCP(2)

STATE OF ALASKA

KETCHIKAN ALASKA

SOUTH TONGASS HIGHWAY COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH PROJECT NO. TE-0922 (18) 71372

DESIGNED BY: W. HOLBROOK

DRAWN BY:

PROJECT NO. 71372

DATE:

SIGN SUMMARY

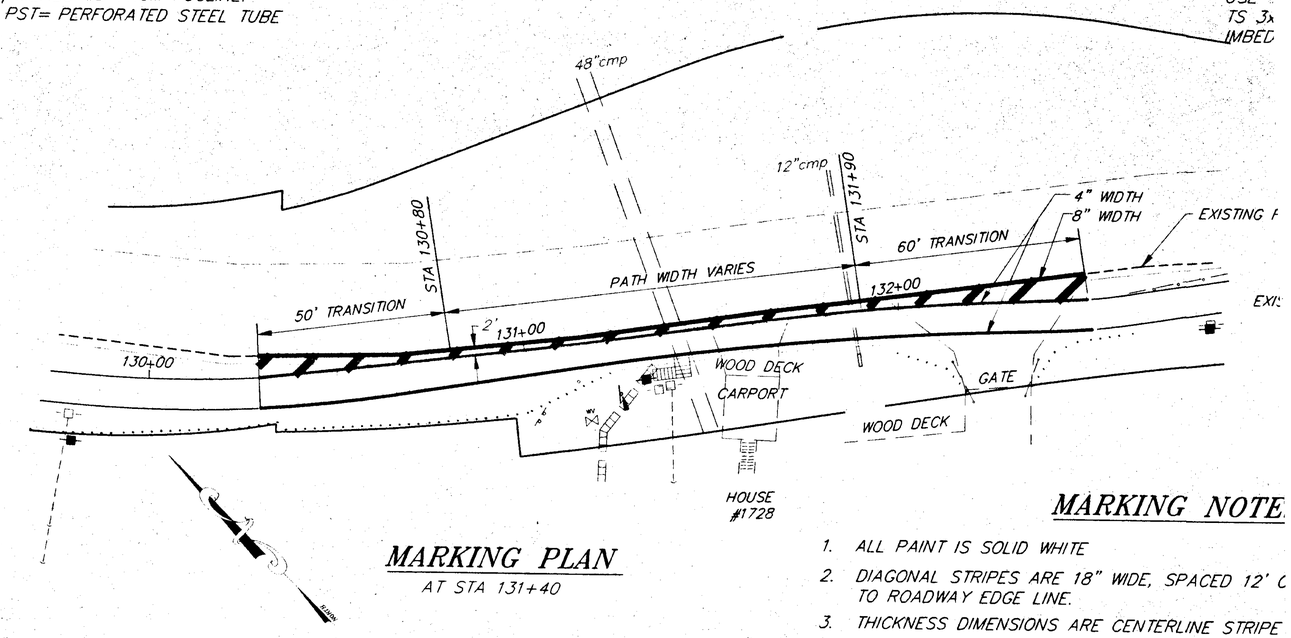
SIGN NO.	STATION	* OFFSET LT.	* OFFSET RT.	CODE NO.	LEGEND	SIGN PANEL SIZE	SIGN PANEL THICKNESS	SIGN PANEL AREA SQ FT.	SIGN PANEL NO. OF POSTS	SIGN PANEL TYPE	POSTS SIZE	POSTS LENGTH	POSTS EMBEDMENT	REMARKS
①	110+55			R5-3	NO MOTOR VEHICLES	24"X24"	0.080"	4	1	PST	2"x2"	7'-9"	3'-0"	NEW SIGN & POST.
②	112+85	1'		R8-3	NO PARKING	–	–	–	1	PST	2"x2"	9'-9"	3'-6"	RELOCATE EXISTING SIGN ON NEW POST.
③	115+70		11'	R5-3	NO MOTOR VEHICLES	24"X24"	0.080"	4	1	PST	2"x2"	7'-9"	3'-0"	NEW SIGN & POST.
④	118+75		11'	R2-1	SPEED LIMIT 45 MPH	–	–	–	1	PST	2"x2"	8'-3"	3'-0"	RELOCATE EXISTING SIGN ON NEW POST.
⑤	123+75		11'	–	PLEASE DON'T LITTER	–	–	–	2	PST	2"x2"	7'-9"	3'-0"	RELOCATE EXISTING SIGN ON 2 NEW POSTS.
⑥	124+77		6'	OM-3R		12"X36"	.02	6	–	–	–	–	–	TYPE III OBJECT MARKER SIGNS (2) MOUNT TO BOTH SIDES POWER POLE. SEE NOTE 6.
⑦	125+50		11'	R5-3	NO MOTOR VEHICLES	24"X24"	0.080"	4	1	PST	2"x2"	7'-9"	3'-0"	NEW SIGN & POST.
⑧	131+25		11'	R8-3	NO PARKING	24"X30"	0.080"	5	1	PST	2"x2"	10'-3"	3'-0"	NEW SIGN & POST.
⑨	134+90		11'	R9-6	YIELD TO PEDS.	12"X18"	0.080"	3	1	PST	2"x2"	11'-3"	3'-0"	NEW SIGNS (2) AND POST. MOUNT TO BOTH SIDES SAME POST.
⑩	139+70		11'	W1-4R W13-1		30"X30" 18"X18"	0.080" 0.080"	6.25 2.25	1	TUBE STEEL	3"x3"	13'-9"	3'-0"	** RELOCATE EXISTING SIGNS ON NEW POST.
⑪	143+42		5'	OM-3R		12"X36"	.02	6	–	–	–	–	–	TYPE III OBJECT MARKER SIGNS (2) MOUNT TO BOTH SIDES POWER POLE. SEE NOTE 6.
⑫	144+72		7'	OM-3R		12"X36"	.02	6	–	–	–	–	–	TYPE III OBJECT MARKER SIGNS (2) MOUNT TO BOTH SIDES POWER POLE. SEE NOTE 6.
⑬	146+34		5'	OM-3R		12"X36"	.02	6	–	–	–	–	–	TYPE III OBJECT MARKER SIGNS (2) MOUNT TO BOTH SIDES POWER POLE. SEE NOTE 6.
⑭	148+00		11'	R9-6	YIELD TO PEDS.	12"X18"	0.080"	3	1	PST	2"x2"	14'-3"	3'-0"	NEW SIGNS (2) AND POST. MOUNT TO BOTH SIDES SAME POST.
⑮	151+05	1'		W2-1		–	–	–	1	PST	2 1/2"X2 1/2"	9'-9"	4'-0"	RELOCATE EXISTING SIGN ON NEW POST.
⑯	152+35		11'	R2-1	SPEED LIMIT 30 MPH	–	–	–	1	PST	2"x2"	9'-3"	3'-6"	RELOCATE EXISTING SIGN ON NEW POST.
⑰	154+50		11'	S3-1	SCHOOL BUS STOP AHEAD	–	–	–	1	PST	2 1/2"X2 1/2"	10'-3"	4'-0"	RELOCATE EXISTING SIGN ON NEW POST.
⑱	159+79		6'	OM-3R		12"X36"	.02	6	–	–	–	–	–	TYPE III OBJECT MARKER SIGNS (2) MOUNT TO BOTH SIDES POWER POLE. SEE NOTE 6.
⑲	164+03		11'	R5-3	NO MOTOR VEHICLES	24"X24"	0.080"	4	1	PST	2"x2"	8'-3"	3'-0"	NEW SIGN & POST.
⑳	164+40		5'	OM-3R		12"X36"	.02	6	–	–	–	–	–	TYPE III OBJECT MARKER SIGNS (2) MOUNT TO BOTH SIDES POWER POLE. SEE NOTE 6.
㉑	166+33		5'	OM-3R		12"X36"	.02	6	–	–	–	–	–	TYPE III OBJECT MARKER SIGNS (2) MOUNT TO BOTH SIDES POWER POLE. SEE NOTE 6.
㉒	168+95	1'		D10-1	MILE 2	–	–	–	1	PST	2"x2"		3'-0"	RELOCATE EXISTING SIGN ON NEW POST.
㉓	170+05		11'	R9-6	YIELD TO PEDS.	12"X18"	0.080"	3	1	PST	2"x2"		3'-0"	NEW SIGNS (2) AND POST. MOUNT TO BOTH SIDES SAME POST.
㉔	173+93		7'	OM-3R		12"X36"	.02	6	–	–	–	–	–	TYPE III OBJECT MARKER SIGNS (2) MOUNT TO BOTH SIDES POWER POLE. SEE NOTE 6.
㉕	176+03		5'	OM-3R		12"X36"	.02	6	–	–	–	–	–	TYPE III OBJECT MARKER SIGNS (2) MOUNT TO BOTH SIDES POWER POLE. SEE NOTE 6.
㉖	177+60		7'	OM-3R		12"X36"	.02	6	–	–	–	–	–	TYPE III OBJECT MARKER SIGNS (2) MOUNT TO BOTH SIDES POWER POLE. SEE NOTE 6.
㉗	181+25		11'	R8-3 R8-1A	NO PARKING ON PAVEMENT OR WITHIN 8 FEET	24"X30" 12"X24"	0.080" 0.080"	5 2	1	PST	2"x2"	9'-0"	3'-6"	NEW SIGNS (2) AND POST. MOUNT TO BOTH SIDES SAME POST.
㉘	188+00		11'	R8-3 R8-1A	NO PARKING ON PAVEMENT OR WITHIN 8 FEET	24"X30" 12"X24"	0.080" 0.080"	5 2	1	PST	2"x2"	9'-0"	3'-6"	NEW SIGNS (2) AND POST. MOUNT TO BOTH SIDES SAME POST.
						TOTAL S.F. = 112.50								

* MEASURED FROM LEFT EDGE OF RECPATH.
† MEASURED FROM FOGLINE.
PST= PERFORATED STEEL TUBE

** USE
TS 3x
IMBED

SIGNING NOTES:

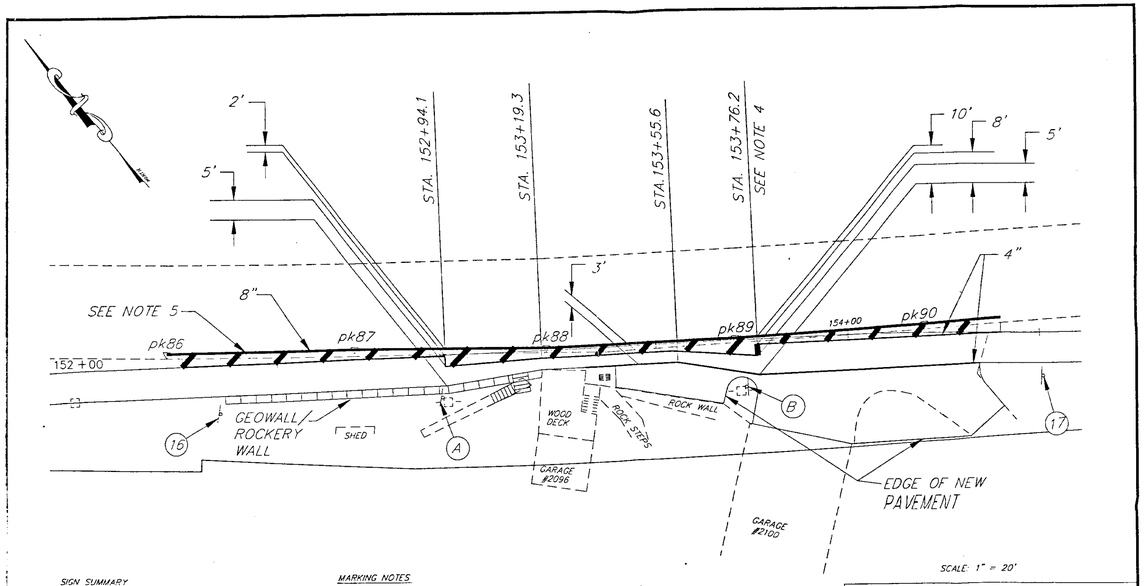
1. SIGN LOCATIONS ARE SHOWN ON P&P SHEETS, IDENTIFIED BY SIGN NO. CORRESPONDING TO THOSE SHOWN IN SIGNING SUMMARY.
2. REMOVE & DISPOSE OF ALL EXISTING SIGN POSTS. EXISTING SIGNS SHALL BE RELOCATED PER SIGNING SUMMARY THIS SHEET.
3. SIGNING CODE NUMBER AND SIZING DESIGNATION PER ALASKA SIGNING MANUAL (ASM) AND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR HIGHWAY CLASS L DESIGNATION.
4. ALL POSTS SHALL BE FABRICATED FROM SHEET STEEL ASTM A-446 GRADE D MIN. (fy=50 KSI). ALL SIGNS SHALL BE SHEET ALUMINUM ALLOY 6061-T6, OR 5052-H36 OR H38 PER SECTION 730.
5. NEW AND RELOCATED SIGNS SHALL BE PLACED A MINIMUM OF 3' OUTBOARD AND 5' MINIMUM ABOVE (FINISH GRADE PATH TO BASE OF SIGN) EXCEPT AS NOTED IN THE SIGNING SUMMARY. SIGNS PLACED BETWEEN EXISTING GUARDRAIL AND RECREATION PATH SHALL BE PLACED A MINIMUM OF 6'-6" ABOVE THE PATH. SECONDARY SIGN PANEL MOUNTING HEIGHTS (2 SIGNS, SAME DIRECTION MOUNTED ON 1 POST) SHALL BE PER STANDARD DRAWING S-05.00.
6. TYPE III OBJECT MARKER SIGNS SHALL BE MOUNTED TO POLE WITH 1/2" STAINLESS STEEL STAPLES. DISTANCE FROM FINISH GRADE RECREATION PATH TO BOTTOM OF SIGN SHALL BE 4'. BRACE POLE SIGN SHALL BE MOUNTED IN IT'S LONG DIRECTION ALONG THE AXIS OF THE POLE A MINIMUM OF 1' ABOVE GRADE.
7. POST EMBEDMENT SHALL BE PER STANDARD DRAWING S-30.01 REQUIREMENTS. POST LENGTHS SHOWN DO NOT INCLUDE EMBEDMENT SLEEVE LENGTHS. POST LENGTHS SHOWN MEASURED FROM TOP OF SIGN TO 9" BELOW GROUND LEVEL.
8. ROCK WILL BE ENCOUNTERED. EMBEDMENT LENGTHS SHOWN ARE FOR SOILS



MARKING PLAN
AT STA 131+40

MARKING NOTE

1. ALL PAINT IS SOLID WHITE
2. DIAGONAL STRIPES ARE 18" WIDE, SPACED 12' C TO ROADWAY EDGE LINE.
3. THICKNESS DIMENSIONS ARE CENTERLINE STRIPE



SCALE: 1" = 20'

SIGN SUMMARY
A. "ONE WAY PATH"
B. "ONE WAY PATH YIELD TO ONCOMING TRAFFIC"
16. SEE SIGN SUMMARY ON PLANS.
17. SEE SIGN SUMMARY ON PLANS.

MARKING NOTES
1. ALL PAINT IS SOLID WHITE.
2. DIAGONAL STRIPES ARE 18" WIDE ARE SPACED 12' O.C., AND ORIENTED 45 DEGREES TO ROADWAY EDGE LINE.
3. STRIPING DIMENSIONS ARE CENTERLINE STRIPE TO CENTERLINE STRIPE.
4. 18" X 3' STOP BAR
5. CENTER 8" STRIPE ON P.K. NAIL DESIGN LINE.

KTN S. TONGASS HIGHWAY
C.G. ENTRANCE TO SAXMAN RECREATION PATH
PROJ NO. TE-0902(18) 71372

PATH

BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA

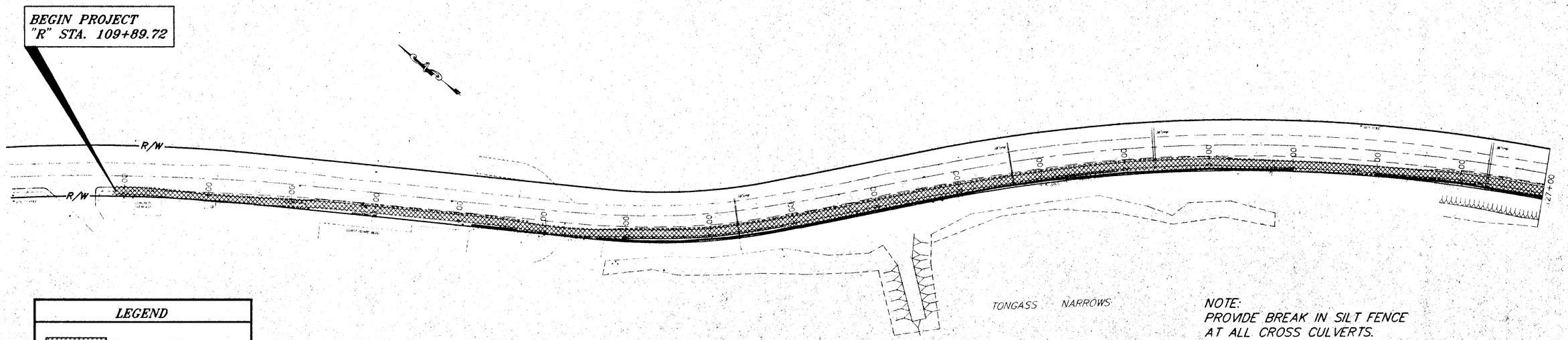
KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA

DESIGNED BY:

PROJECT NO.

STATE OF ALASKA
49th

ROTATED 51°



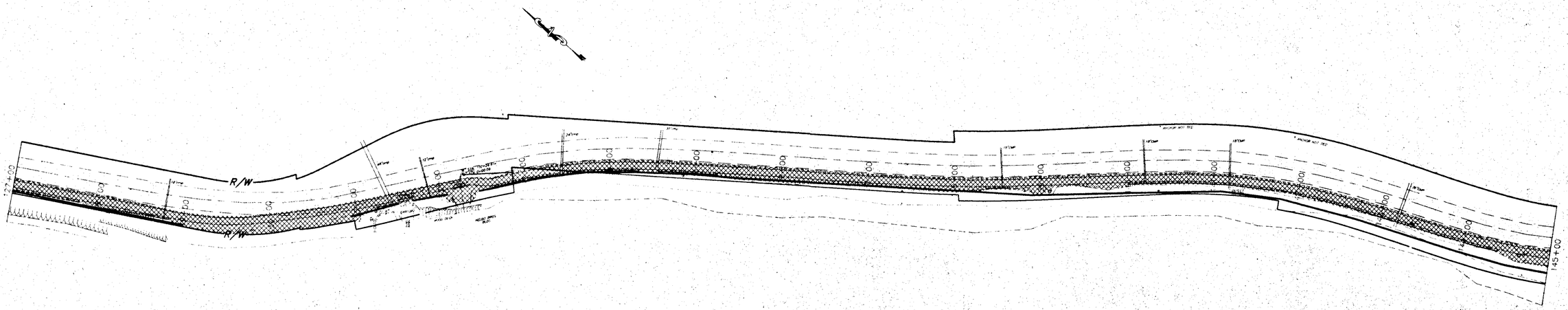
LEGEND

AREA OF DISTURBANCE

SILT FENCE

NOTE:
PROVIDE BREAK IN SILT FENCE
AT ALL CROSS CULVERTS.

ROTATED 50°



NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH:		
BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

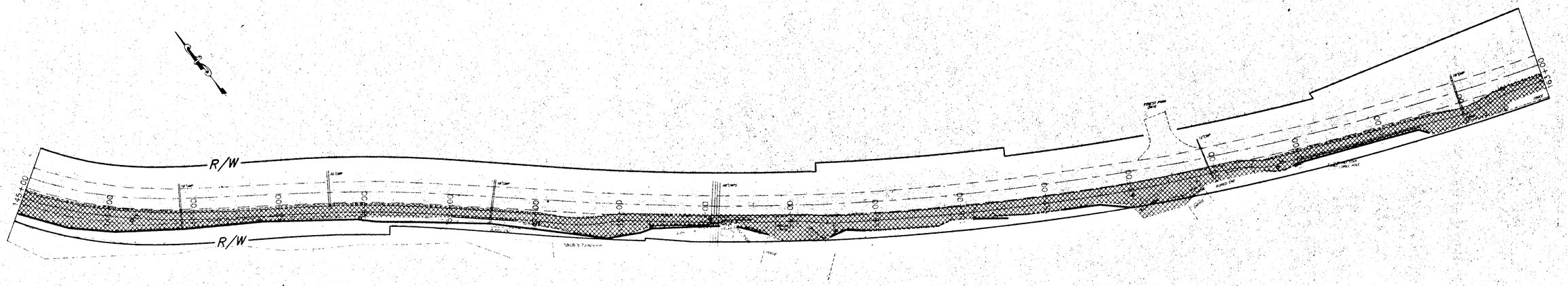
EROSION & SEDIMENT CONTROL PLANS

DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY: C. BECKER	DATE: AUGUST 1995

ENGINEER'S SEAL

STATE OF ALASKA
49th
W.J. Holbrook
CE-6265

ROTATED 38°



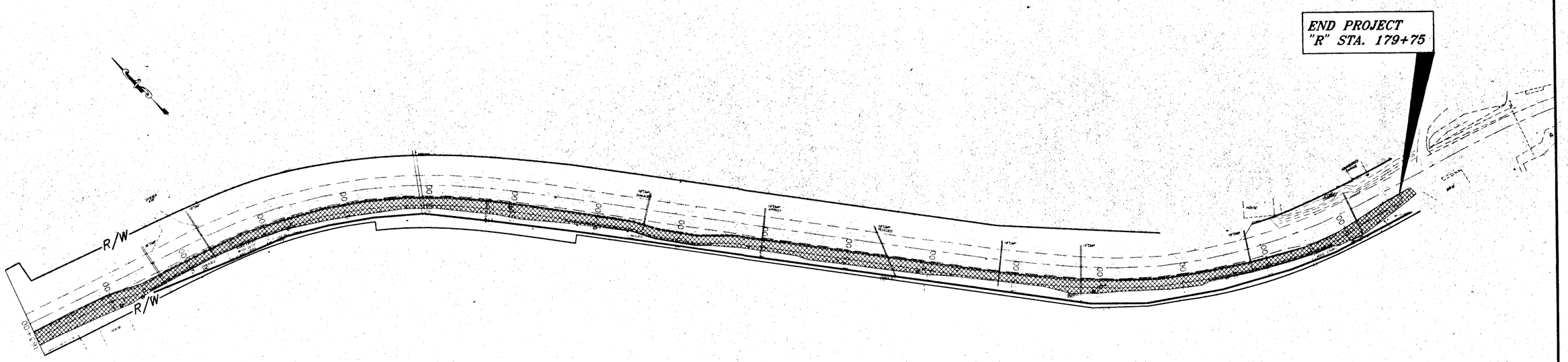
LEGEND

AREA OF DISTURBANCE

SILT FENCE

NOTE:
PROVIDE BREAK IN SILT FENCE
AT ALL CROSS CULVERTS.

ROTATED 44°



NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

ENGINEER'S SEAL

STATE OF ALASKA
49th

W.J. Holbrook

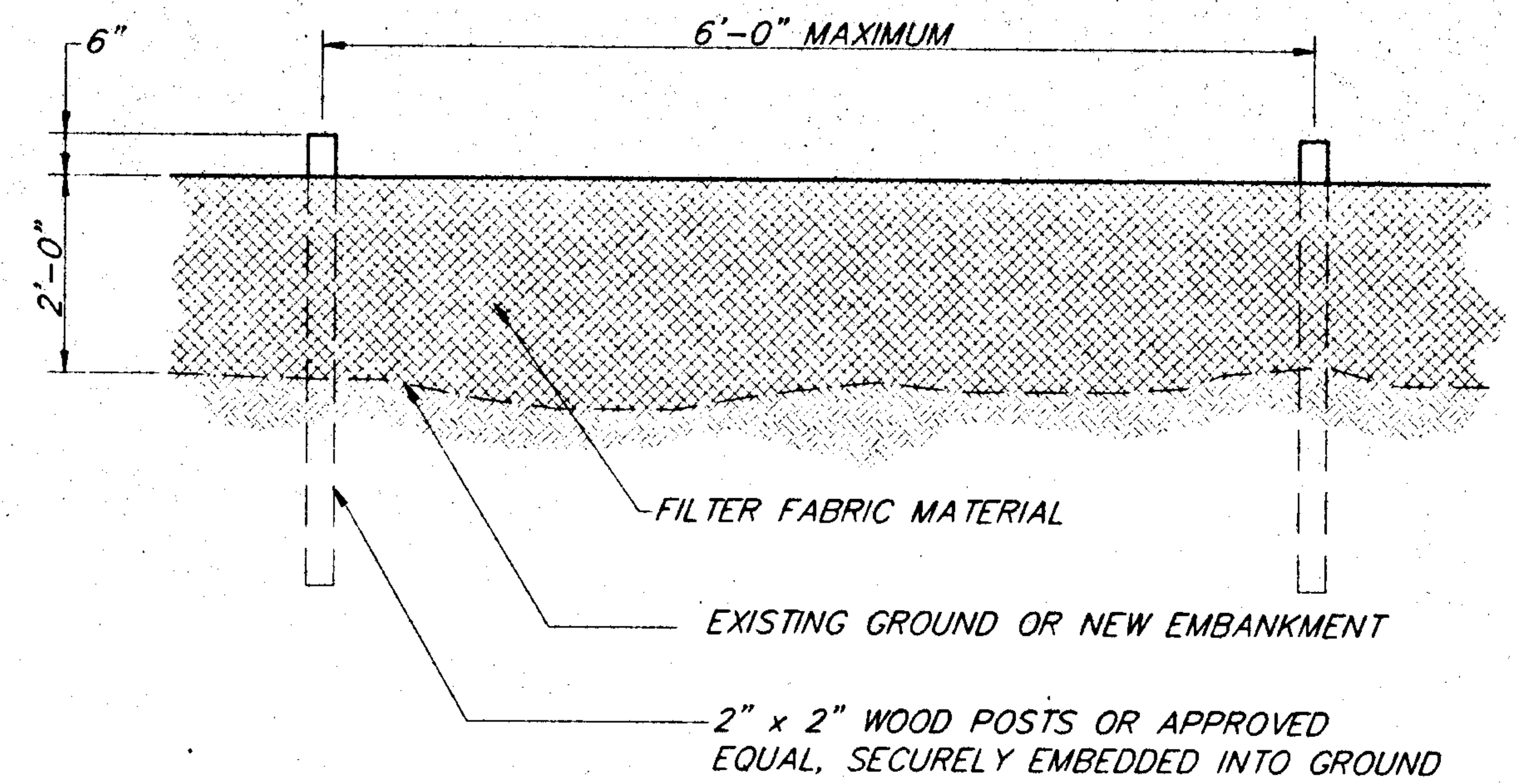
PATH:

BY:	DATE:	DESCRIPTION OF CHANGE:

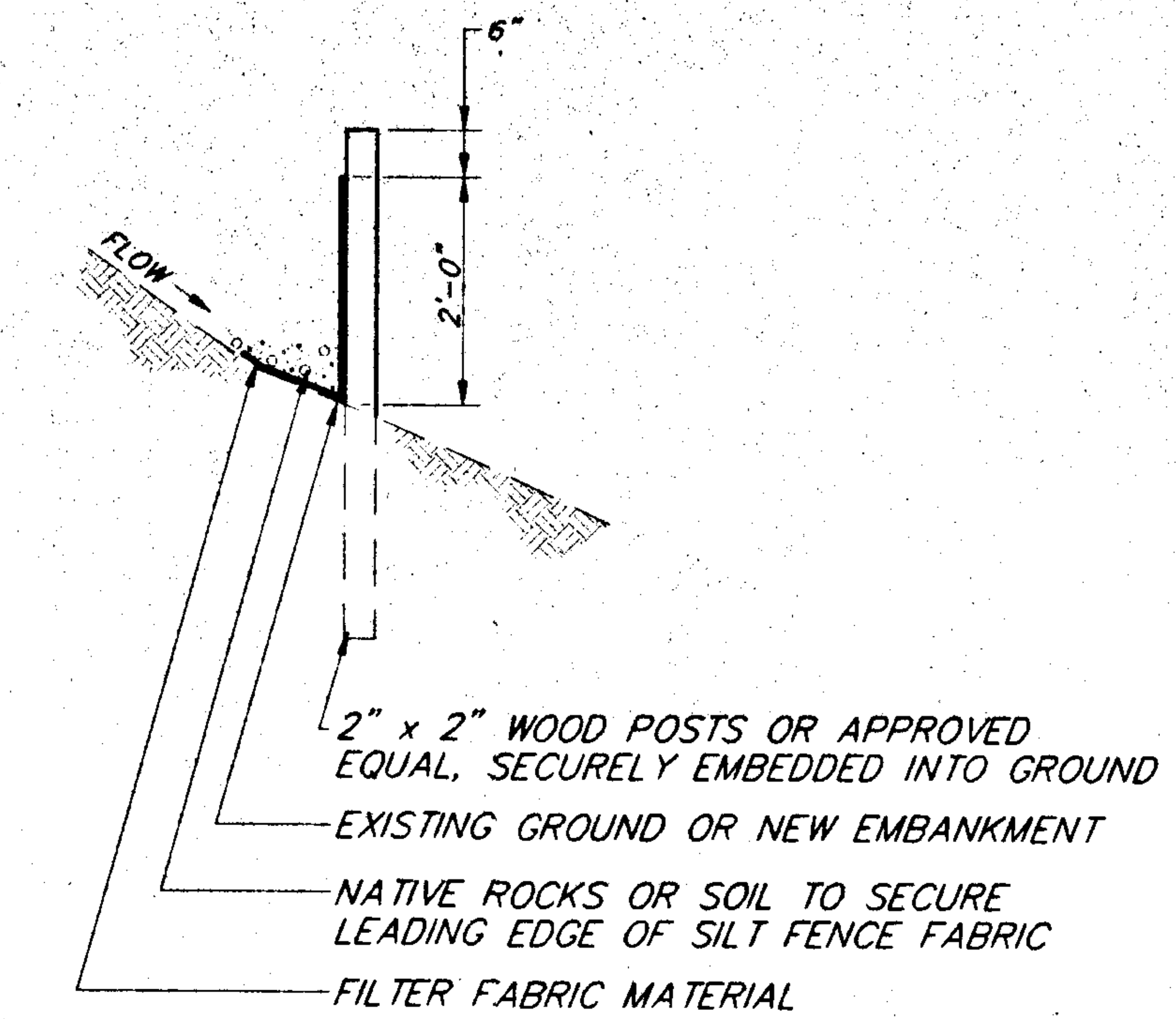
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION

KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY:	DATE:
CHECKED BY:	SHEET NO.



ELEVATION



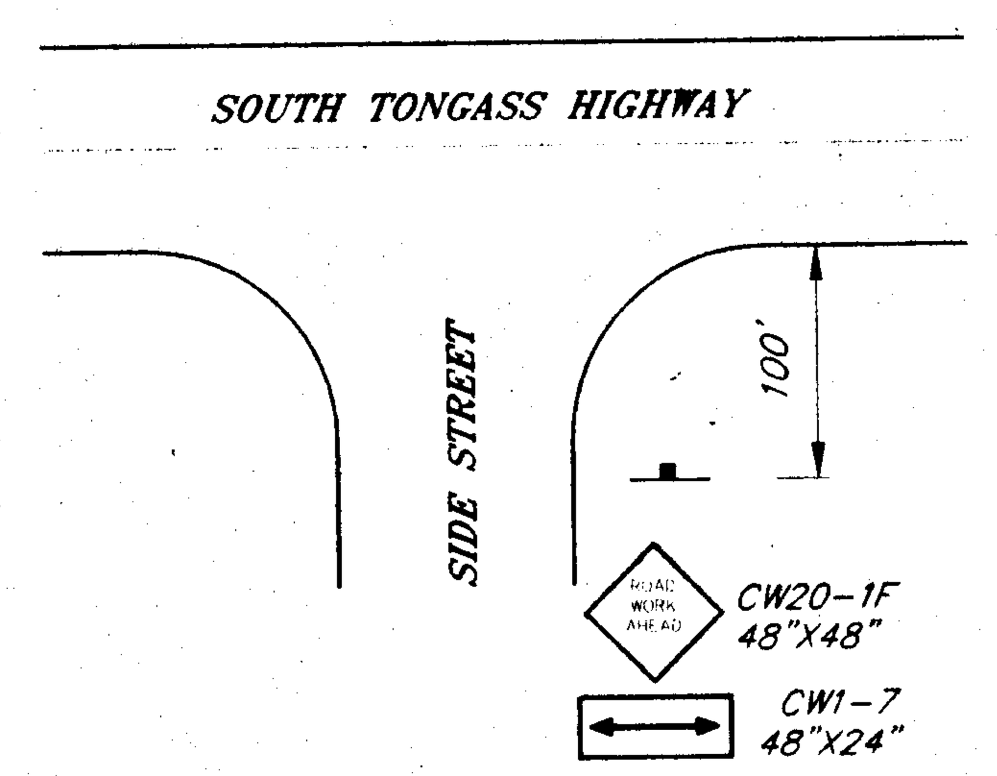
SECTION

SILT FENCE DETAILS

SILT FENCE SUMMARY				
STATION	TO STATION	OFFSET	L.F. REQ'D.	REMARKS
114+25	114+75		~~50'~~ 52	
115+50	124+00		~~850'~~ 864	
125+00	129+00		~~400'~~ 415	
130+80	131+50		~~70'~~ 77	
131+70	132+10		~~40'~~ 43	
132+50	151+50		~~1900'~~ 1885	
152+30	153+20		~~90'~~ 82	
153+50	153+80		30'	
154+40	154+60		~~20'~~	Delete
156+20	156+40		20'	Delete
157+20	158+00		~~80'~~ 81	
159+90	161+70		~~180'~~ 208	
164+50	179+50		~~1500'~~ 1467	
		TOTAL=	5230'	

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH:			STATE OF ALASKA DEPARTMENT OF TRANSPORTATION	KETCHIKAN SOUTH TONGASS HIGHWAY ALASKA COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH	DESIGNED BY: W.J. HOLBROOK	PROJECT NO. 71372
BY:	DATE:	DESCRIPTION OF CHANGE:			DRAWN BY:	DATE:



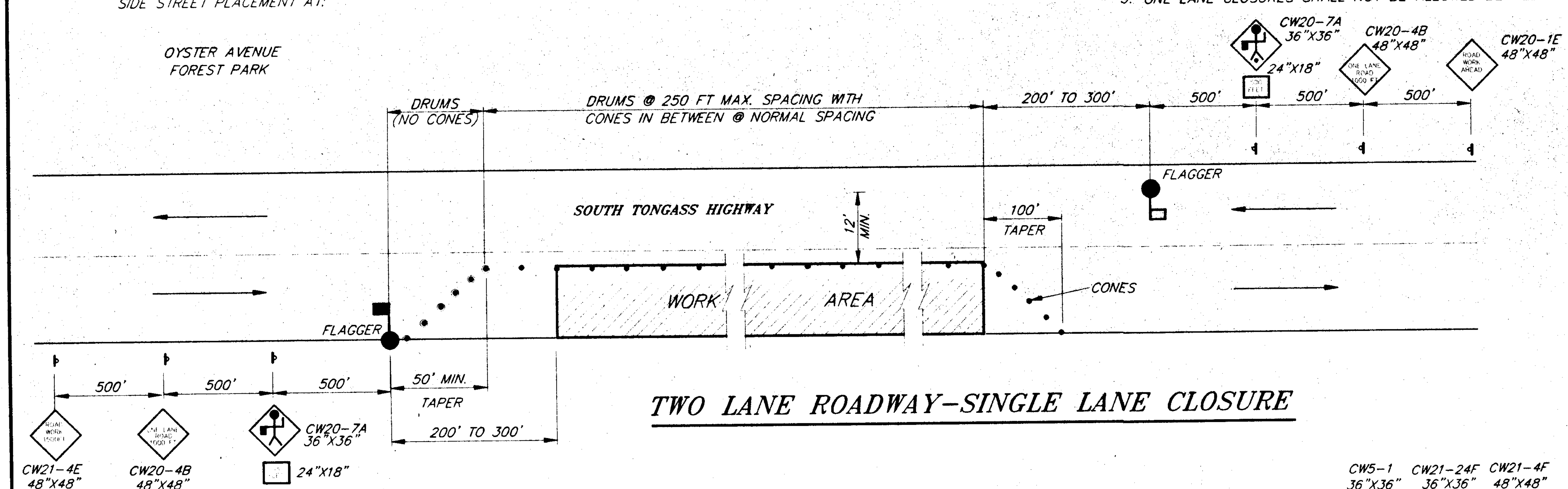
PERMANENT CONSTRUCTION SIGNING FOR SIDE STREETS

SIDE STREET PLACEMENT AT:

OYSTER AVENUE
FOREST PARK

TRAFFIC CONTROL NOTES

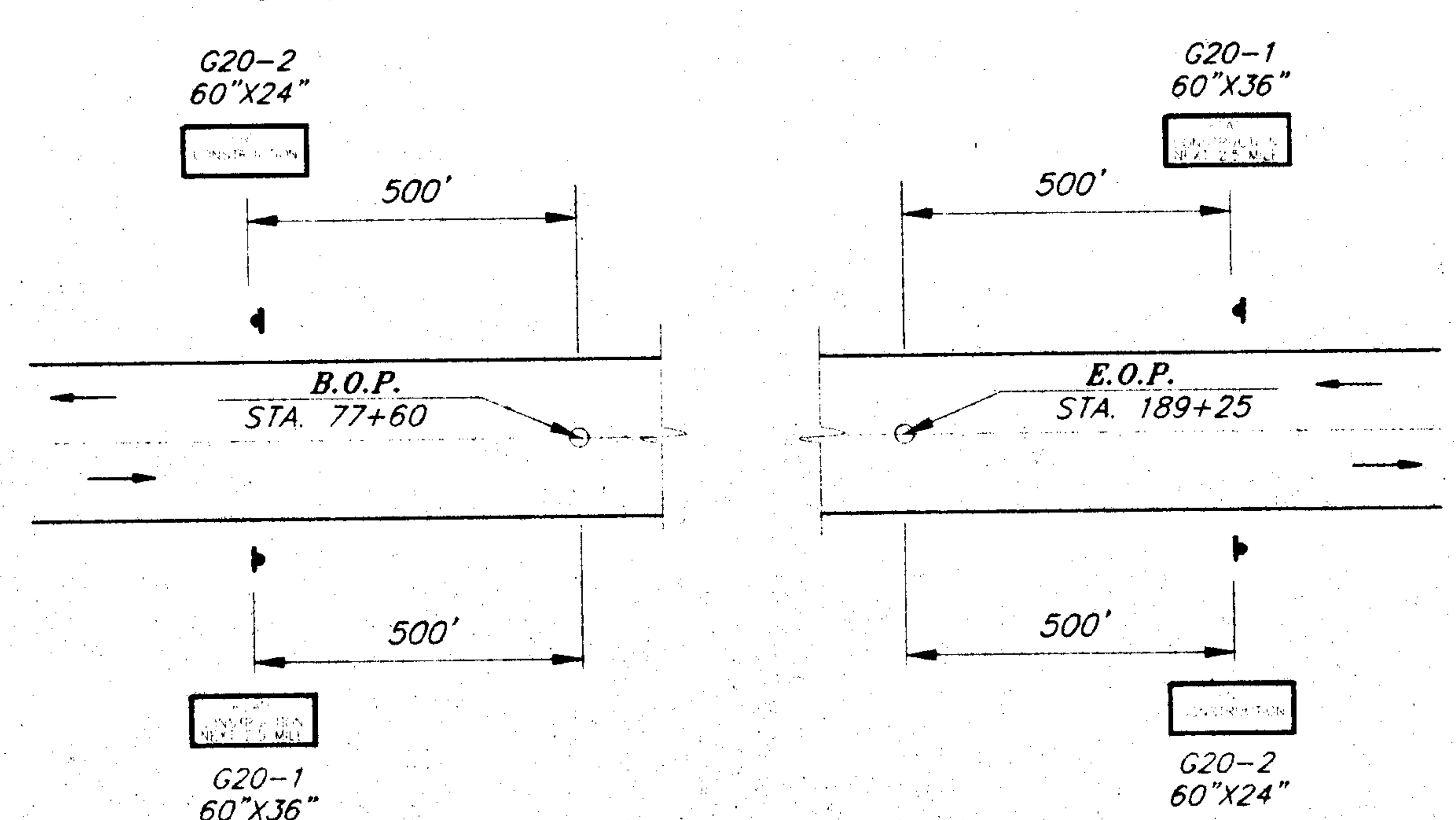
1. CONSTRUCTION SIGNING, FLAGGING, DETOURS AND GENERAL TRAFFIC CONTROL FEATURES SHALL CONFORM TO THE GUIDELINES SET FORTH IN THE "C" SERIES STANDARD DRAWINGS, THE APPLICABLE PORTIONS OF SECTION 115 AND 643 OF THE SPECIFICATIONS AND THE ALASKA TRAFFIC MANUAL.
2. TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 10'-0".
3. NO DRIVEWAY CLOSURES WILL BE ALLOWED WITHOUT THE CONSENT OF THE PROPERTY OWNER. THE CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS.
4. MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES SHALL BE EQUAL TO THE SPEED LIMIT IN FEET ON TANGENTS AND 25' IN TAPER AREAS.
5. THE CONSTRUCTION SIGN SUMMARY SHOWN IN THESE PLANS IS TO BE USED FOR COST ESTIMATING ONLY. ADDED SIGNS MAY BE REQUIRED BY THE ENGINEER, OR MAY BE USED AT THE CONTRACTOR'S OPTION WITH PRIOR APPROVAL OF THE ENGINEER.
6. CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED.
7. CHANNELIZING DEVICES IN USE AT NIGHT SHALL BE LIT IN ACCORDANCE WITH THE ALASKA TRAFFIC MANUAL.
8. THE CONTRACTOR SHALL KEEP THE PUBLIC INFORMED OF HIS CONSTRUCTION ACTIVITIES THROUGH THE USE OF THE LOCAL NEWS MEDIA. ADVANCE NOTICE OF PARTIAL ROAD CLOSURES AND DETOURS SHALL BE PUBLISHED IN THE LOCAL NEWSPAPER(S) AND BROADCAST OVER THE LOCAL RADIO AND TV STATIONS AT LEAST ONE DAY PRIOR TO EACH ACTIVITY. THE MEDIA NOTICE SHALL BE APPROVED BY THE ENGINEER PRIOR TO ITS USE.
9. ONE LANE CLOSURES SHALL NOT BE ALLOWED BETWEEN 7 AND 9 A.M. OR FROM 4 TO 6 P.M. AT OTHER TIMES, ONE LANE CLOSURES ARE ALLOWED ONLY WHEN TRAFFIC CAN BE ACCOMMODATED WITHOUT STOPPING ANY VEHICLE FOR MORE THAN THREE MINUTES. IF STOP TIME EXCEEDS THREE MINUTES, THE CONTRACTOR SHALL EITHER REDUCE THE LENGTH OF THE WORK ZONE TO BRING STOP TIME INTO COMPLIANCE OR REVERT TO TWO WAY OPERATION.



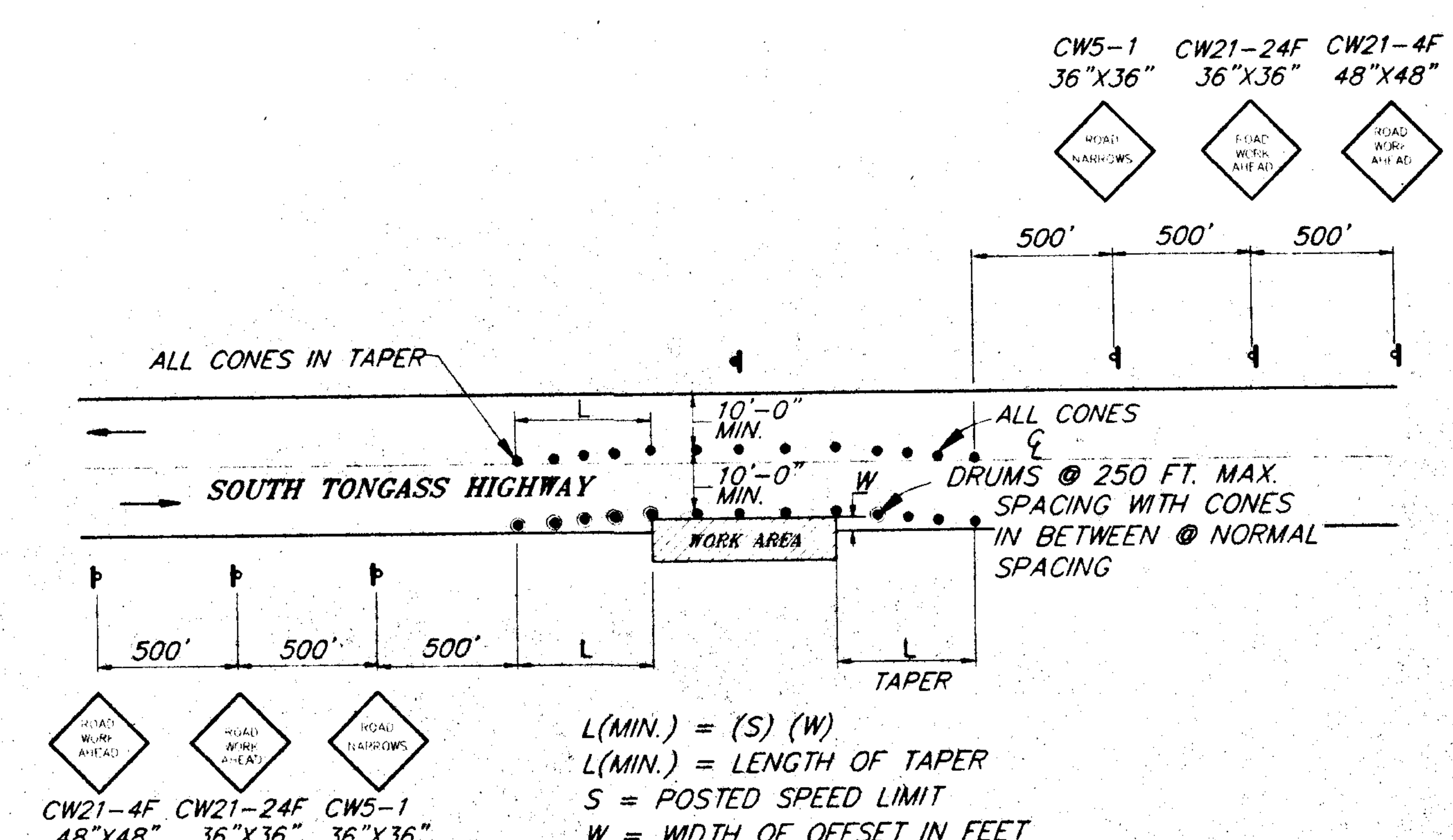
TWO LANE ROADWAY-SINGLE LANE CLOSURE

CONSTRUCTION SIGNS			
CODE	LEGEND	SIZE	QUANT.
CW21-4E	ROAD WORK 1500 FEET	48"X48"	2
CW21-4F	ROAD WORK AHEAD	48"X48"	2
CW20-4B	ONE LANE ROAD 1000 FEET	48"X48"	4
CW20-7A	FLAGGER SYMBOL WITH	36"X36"	4
	SUPPLEMENTAL PLATE - 500 FT	24"X18"	4
CW20-1F	ROAD CONSTRUCTION AHEAD	48"X48"	2
CW21-24F	ROAD WORK AHEAD	36"X36"	2
CW5-1	ROAD NARROWS	36"X36"	2

PERMANENT CONSTRUCTION SIGNS			
CODE	LEGEND	SIZE	QUANT.
G20-1	ROAD CONSTRUCTION NEXT 2.5 MILE	60"X36"	2
G20-2	END CONSTRUCTION	60"X24"	2
CW20-1F	ROAD CONSTRUCTION AHEAD	48"X48"	2
CW1-7	⟵⟶	48"X24"	2



PERMANENT CONSTRUCTION SIGNING



L(MIN.) = (S) (W)
L(MIN.) = LENGTH OF TAPER
S = POSTED SPEED LIMIT
W = WIDTH OF OFFSET IN FEET

ROADWAY ENCROACHMENT

NOTE: IF ONLY ONE LANE IS EFFECTED BY ROAD WORK (THAT IS, THE DRUMS ALONG THE WORK AREA ARE NO CLOSER THAN 10'-0" TO CENTERLINE) THE CENTERLINE CONES FOR THE OPPOSING LANE MAY BE DELETED.

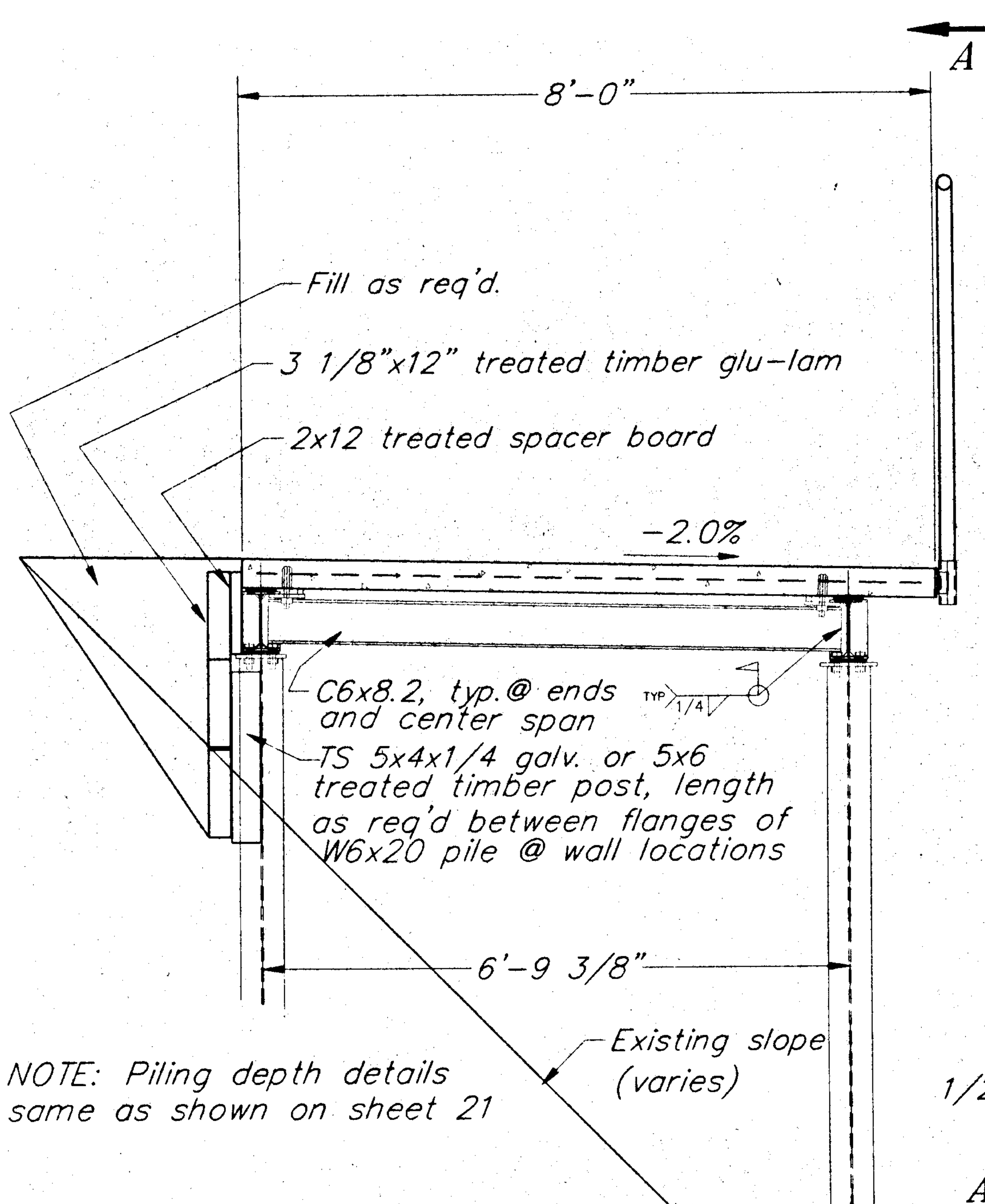
LEGEND

- FIXED SIGNS
- PORTABLE SIGN
- DRUM
- CONE
- WORK AREA

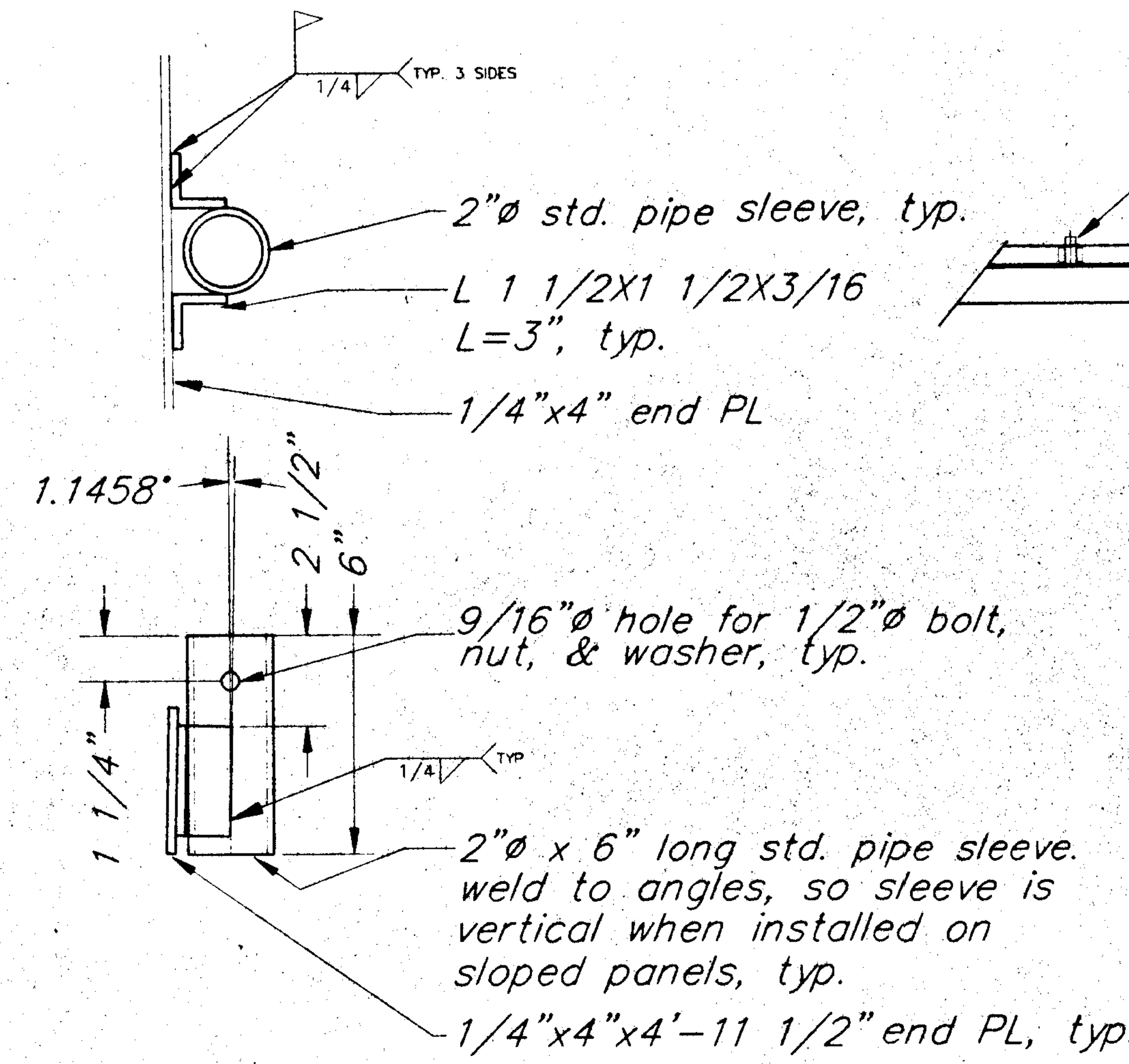
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH:			STATE OF ALASKA DEPARTMENT OF TRANSPORTATION	KETCHIKAN SOUTH TONGASS HIGHWAY COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH PROJECT NO. TE-0902 (18) 71372 ALASKA	DESIGNED BY: P. CARROLL	PROJECT NO. 71372
BY:	DATE:	DESCRIPTION OF CHANGE:			DRAWN BY:	DATE:

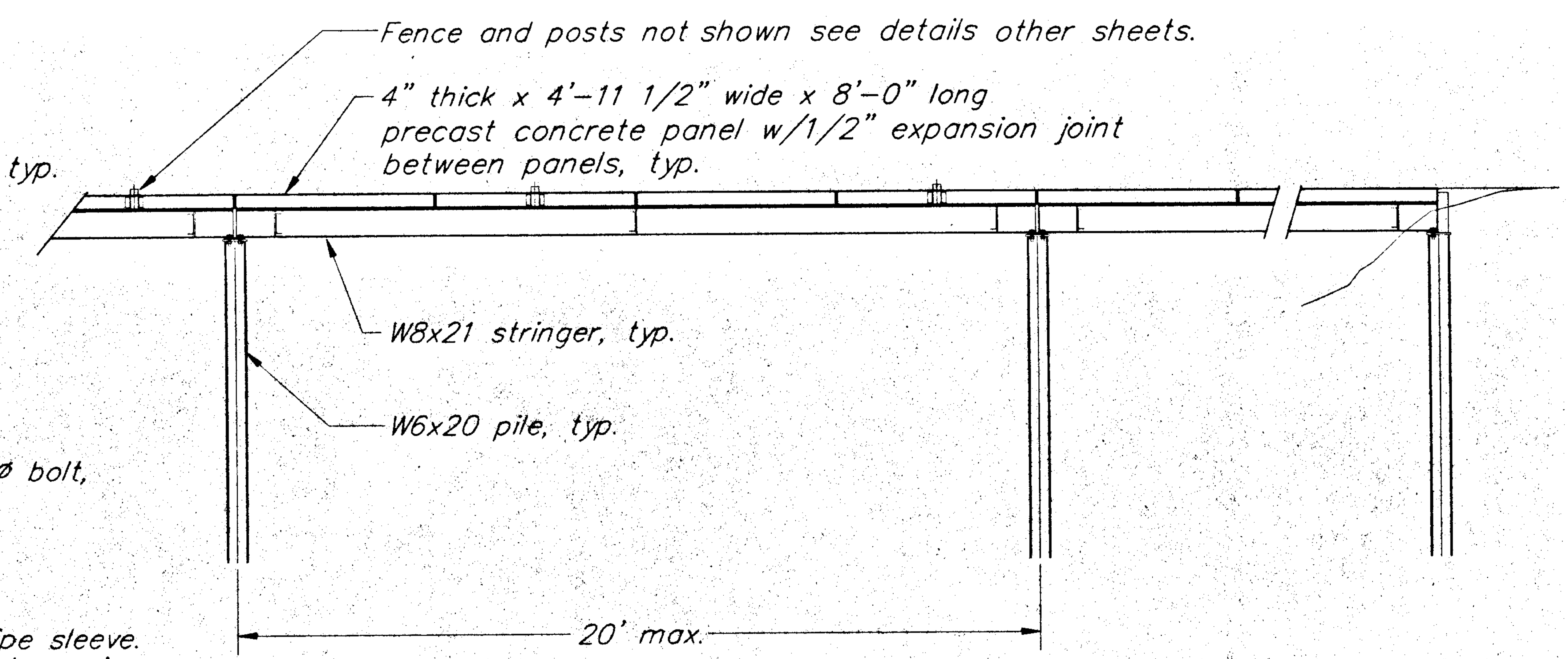
ENGINEER'S SEAL
STATE OF ALASKA 49th



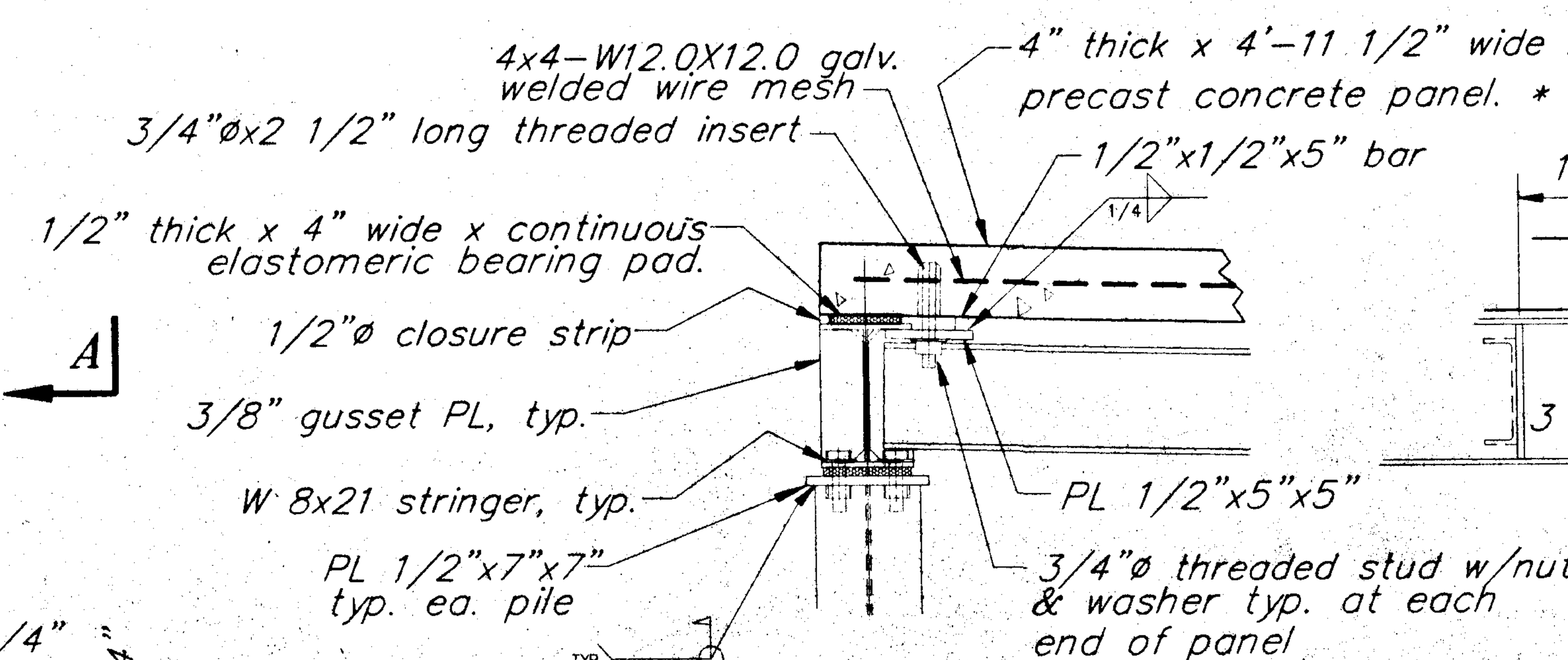
END VIEW



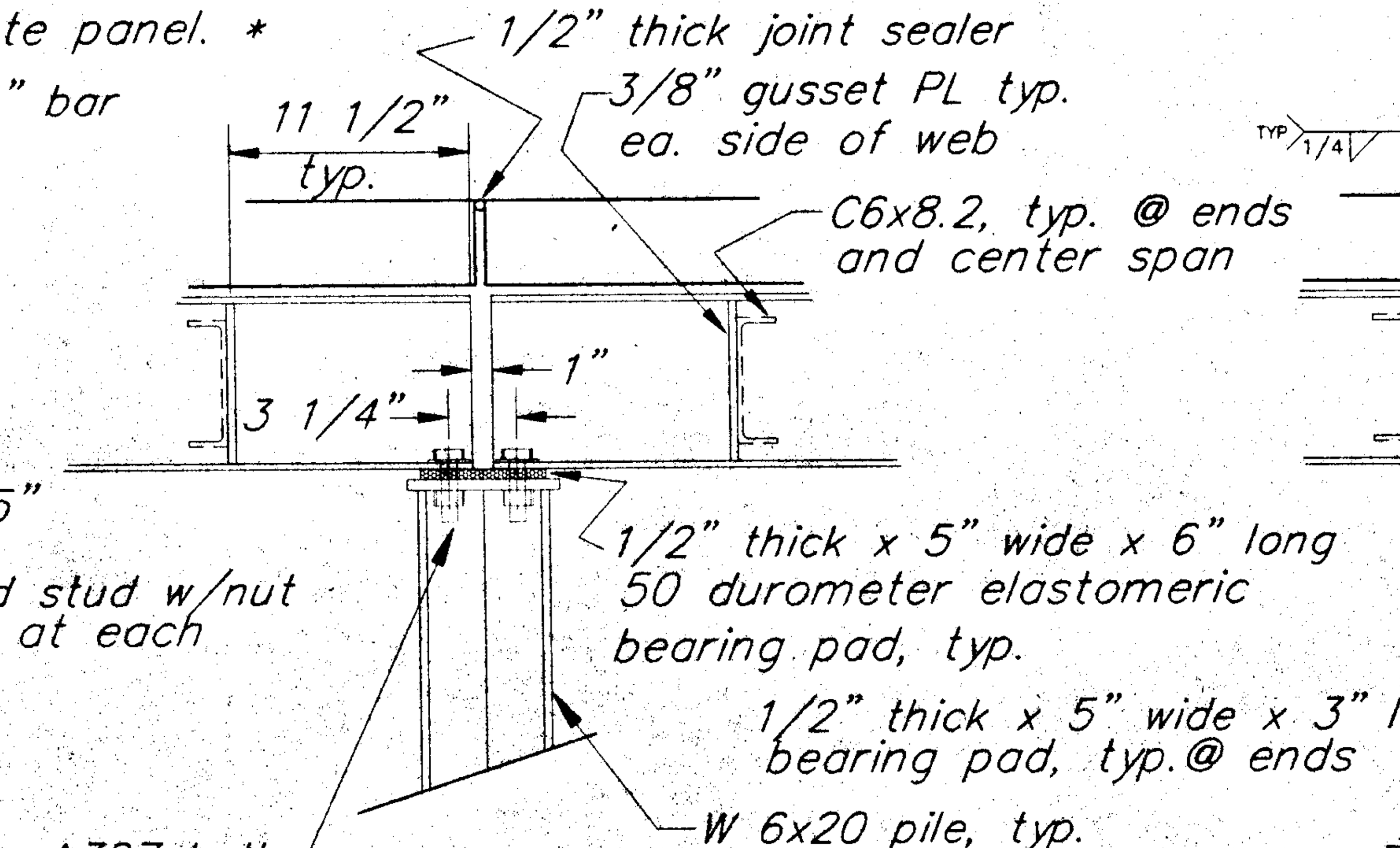
FENCE ATTACHMENT DETAIL



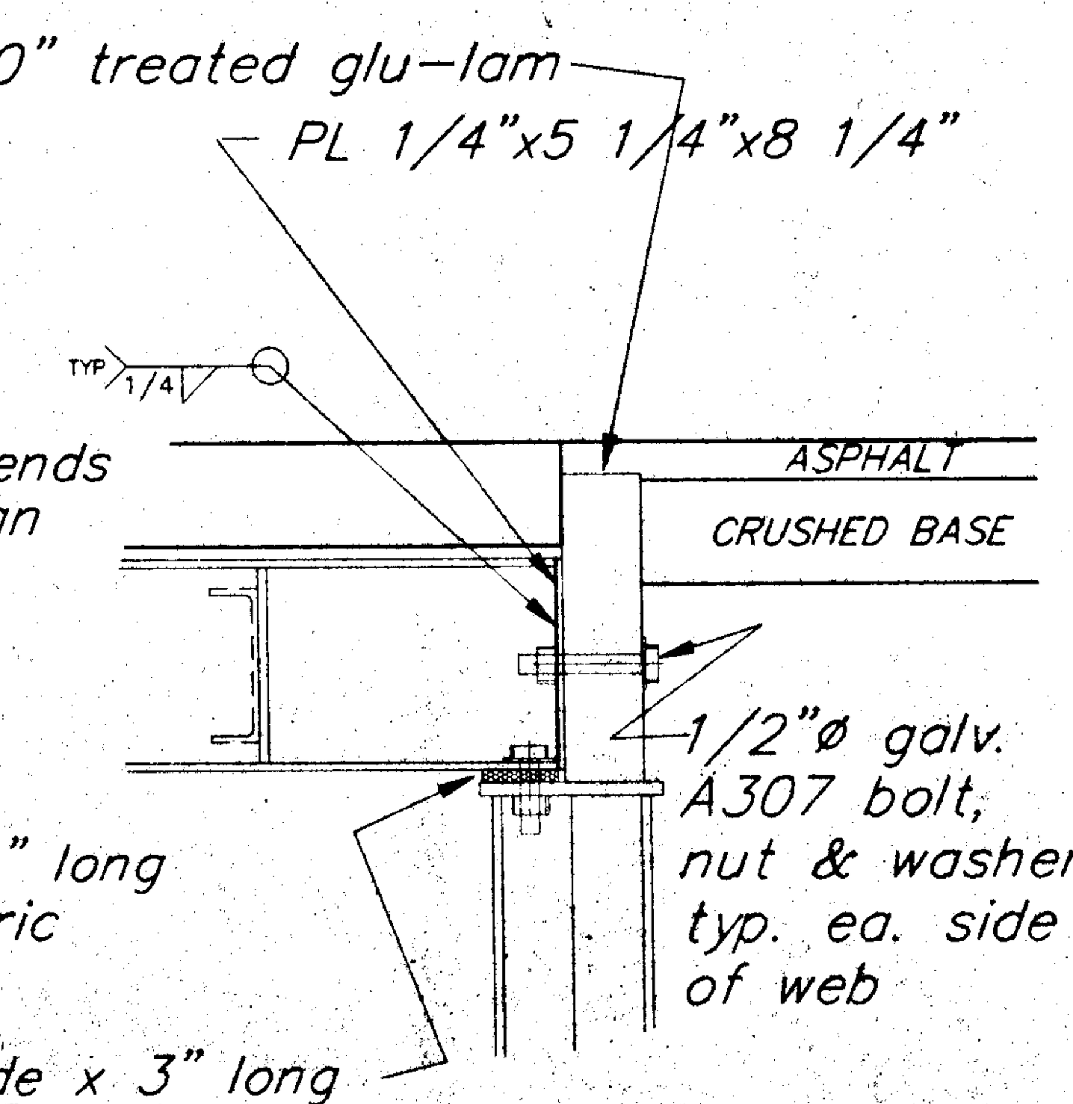
ELEVATION A-A



SECTION DETAIL

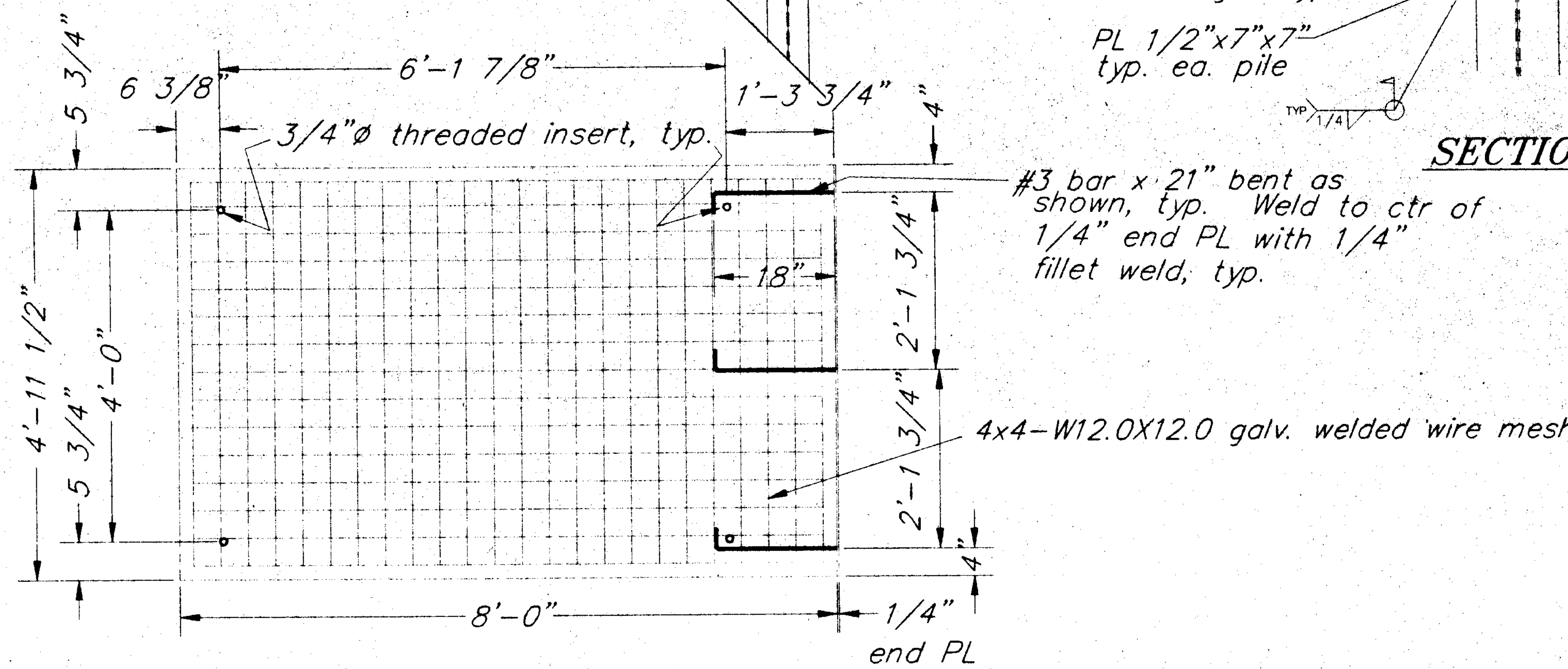


ELEVATION DETAIL



END DETAIL

*NOTE: A stay-in-place galvanized steel form and cast-in-place concrete deck is an acceptable alternative. Submit details for approval.



CONCRETE DECK PANEL DETAIL

GENERAL NOTES

1. Concrete strength Fc' = 5000 psi
   Steel Yield Strength = 60000psi
2. All steel shapes, plates, and hardware shall be A36, galvanized after fabrication
3. Deck panel weight approx. 2100 lbs.
4. All other materials and details remain the same as shown on other sheets.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

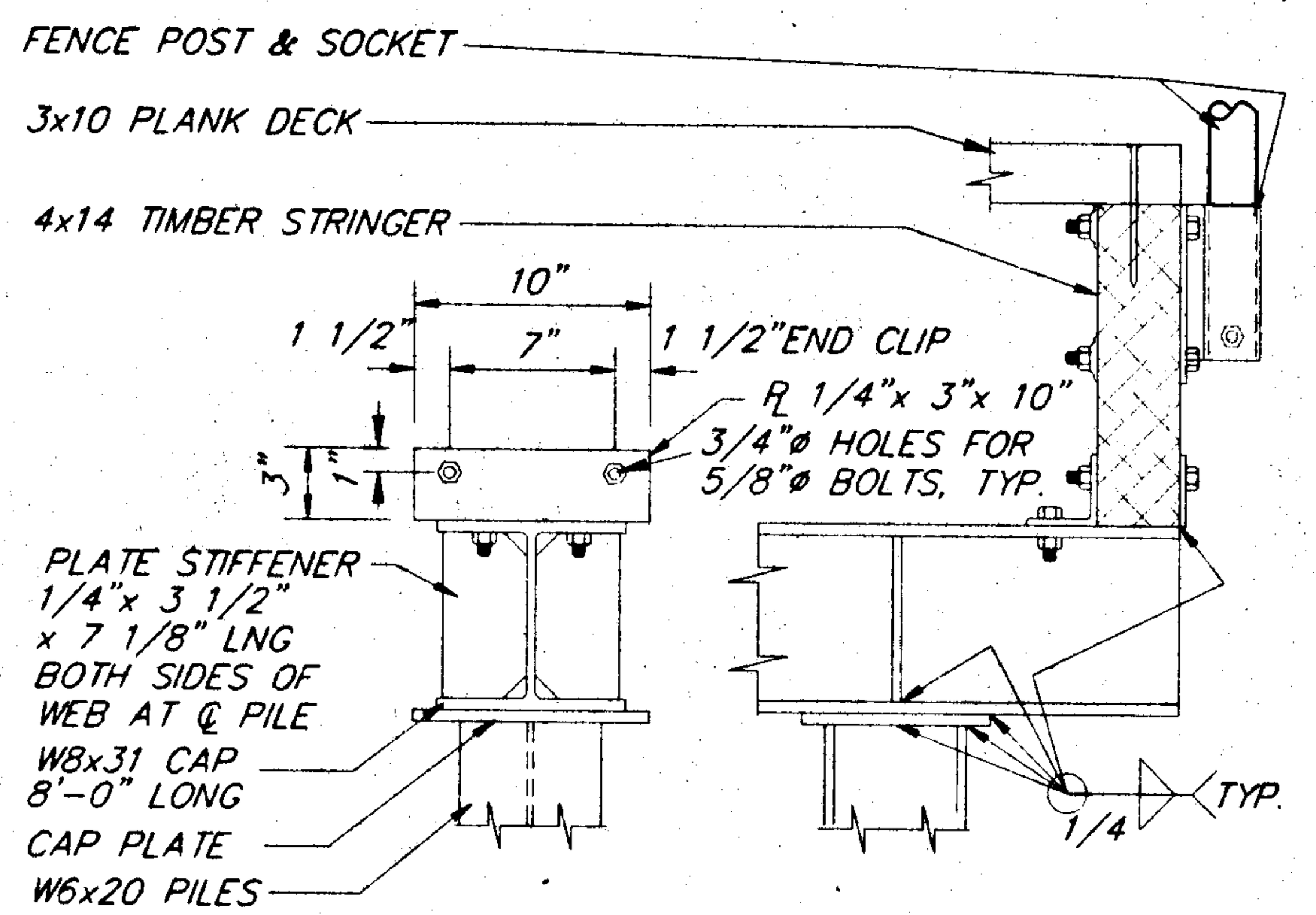
PATH: [illegible]
BY: | DATE: | DESCRIPTION OF CHANGE:

STATE OF ALASKA

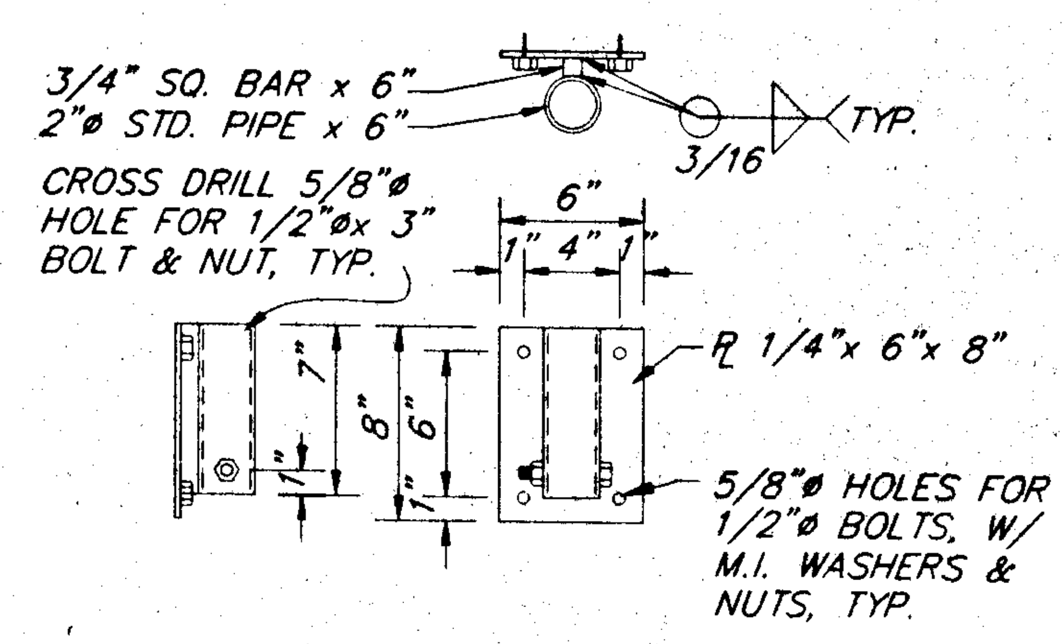
KETCHIKAN — South Tongass Highway — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH

DESIGNED BY: BAS

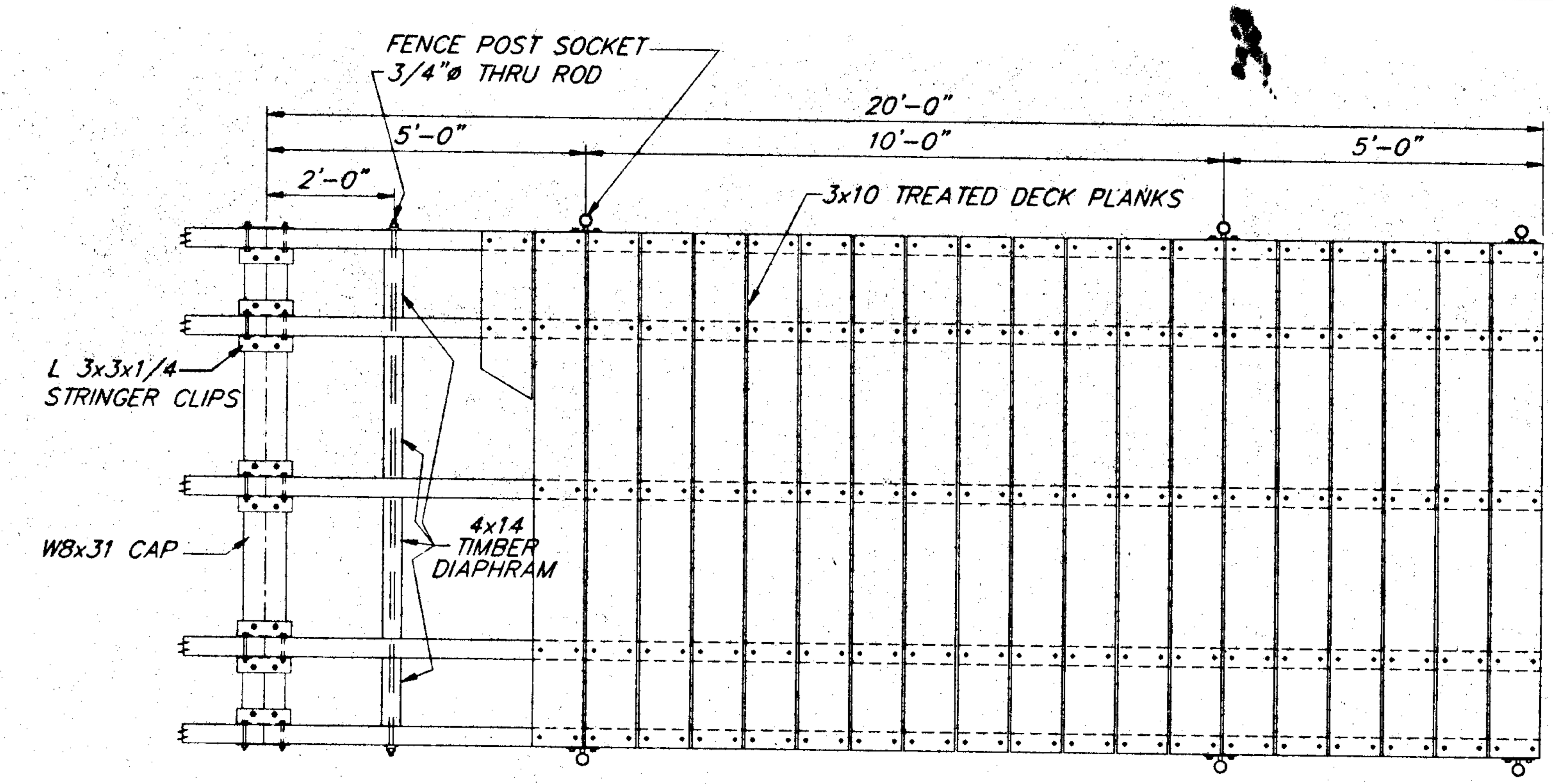
PROJECT NO. 71372



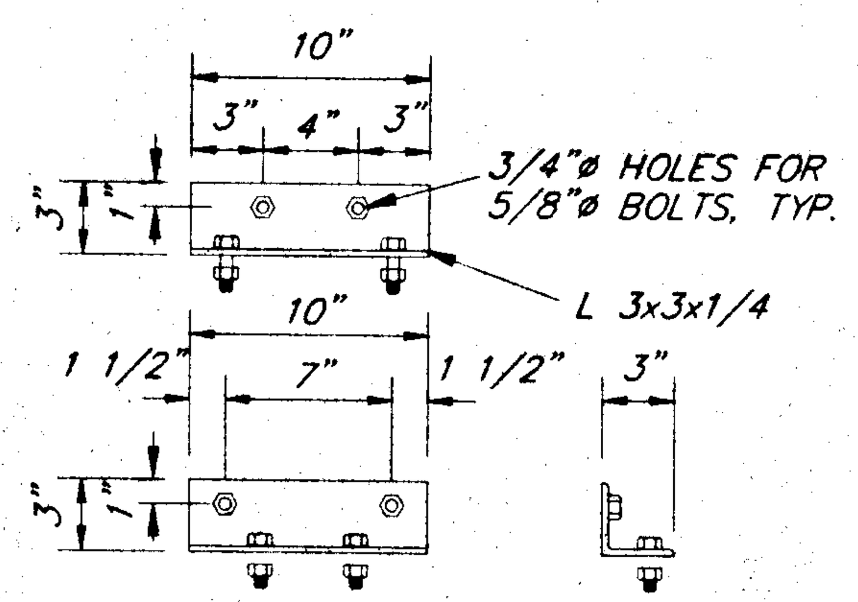
END CLIP & PILE CAP DETAILS



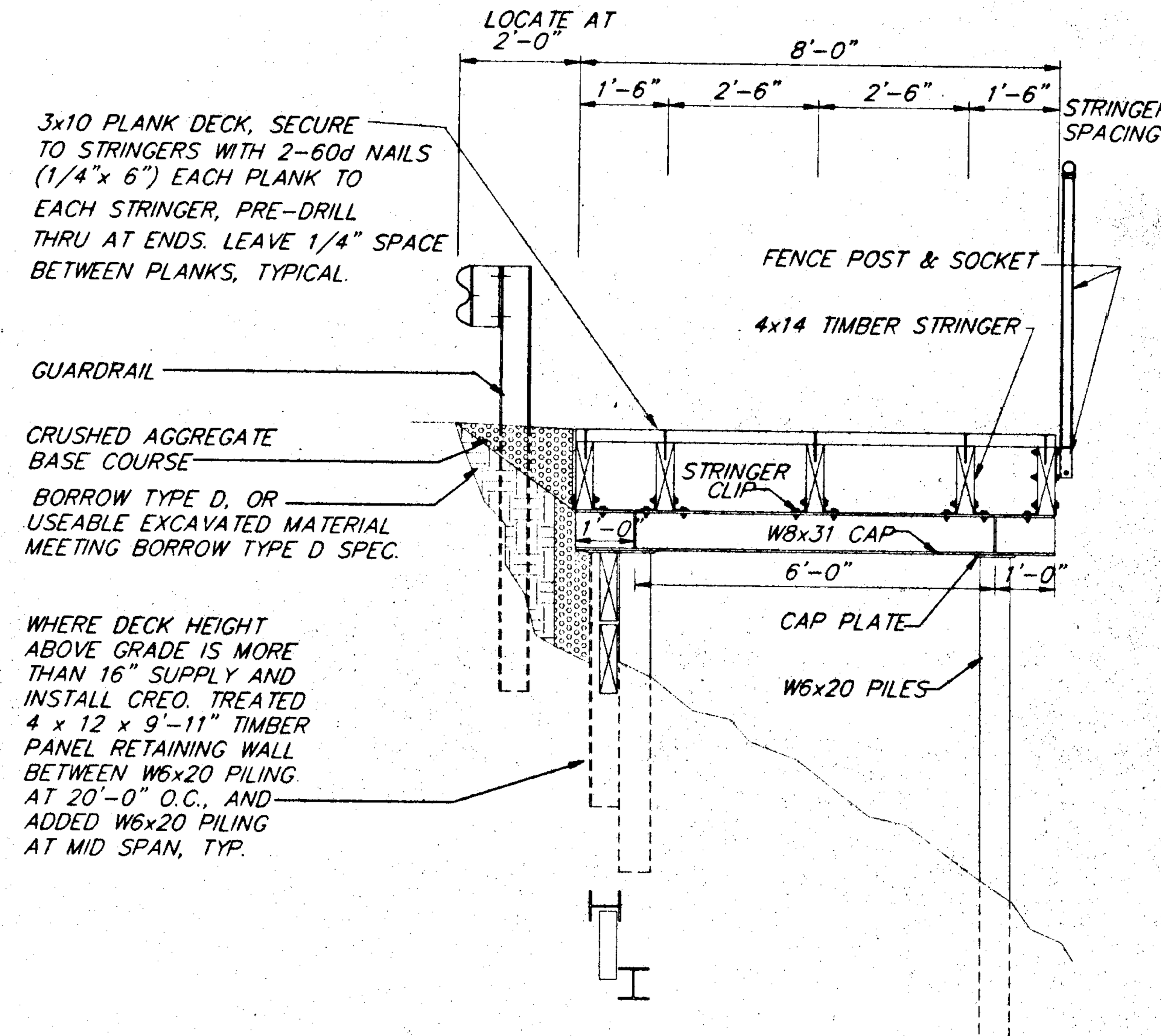
FENCE POST SOCKET DETAIL



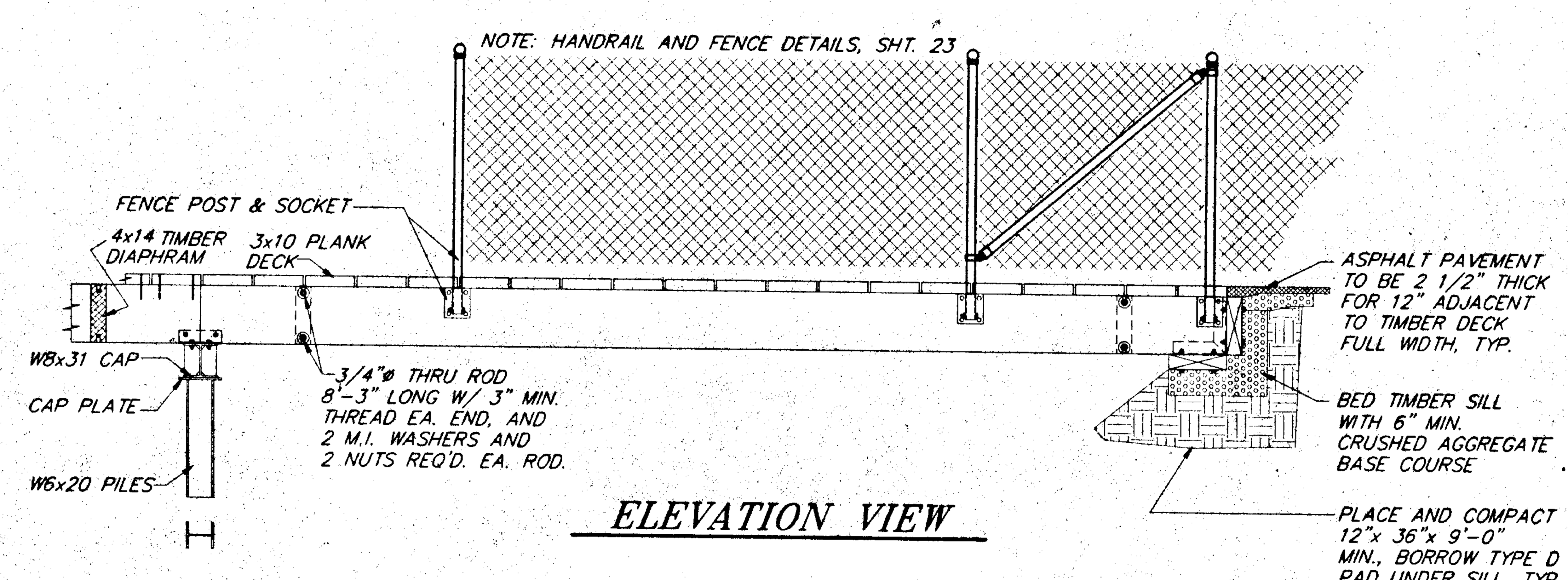
DECK PANEL PLAN



STRINGER CLIP DETAIL



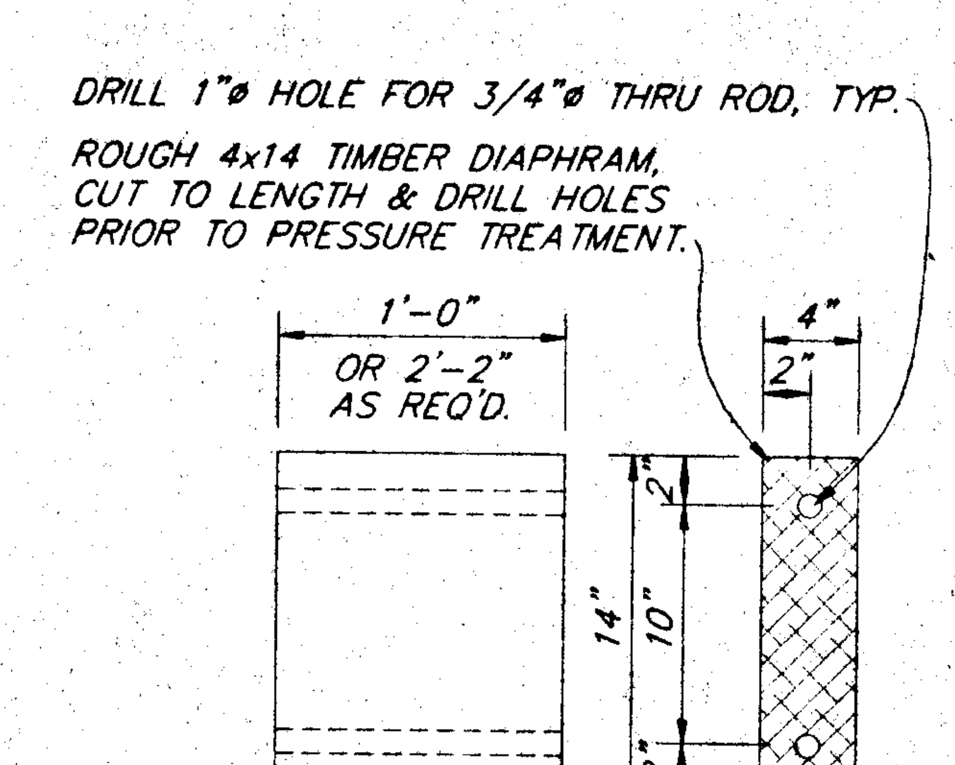
END VIEW



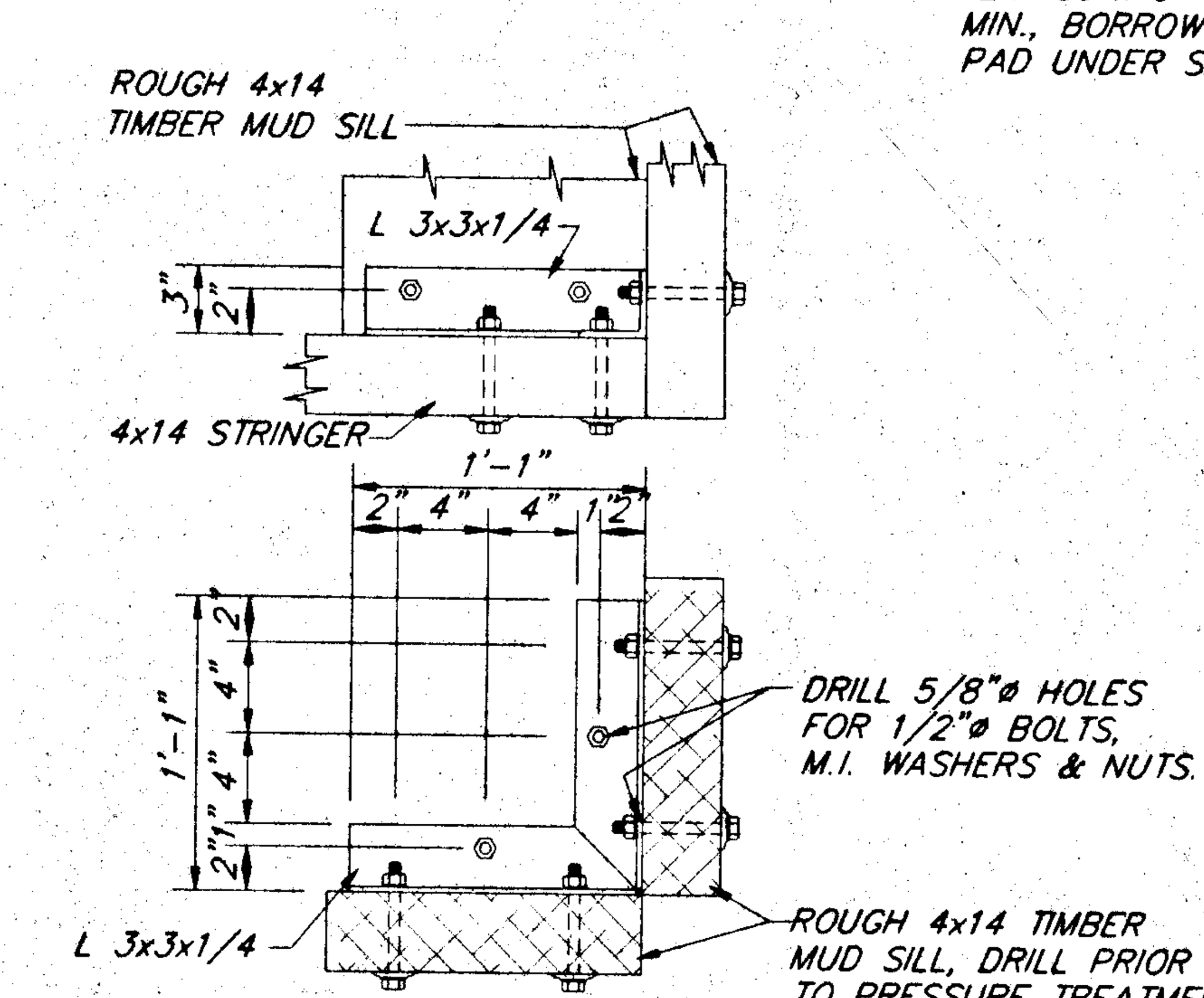
ELEVATION VIEW

GENERAL NOTES

1. APPROXIMATE 8'x 20' DECK PANEL WEIGHT 3300 lb. DESIGN VEHICLE LOAD = 3 TON
2. ALL TIMBER STRINGERS, DIAPHRAMS, & MUD SILLS SHALL BE 4x14 ROUGH SAWN & PRESSURE TREATED WITH CREOSOTE TO 12 PCF RETENTION BY ASSAY.
3. ALL STEEL SHAPES, PLATES, AND HARDWARE SHALL BE A36, GALVANIZED AFTER FABRICATION. ALL BOLTS SHALL BE A307 GALVANIZED.
4. DECKING SHALL BE 3x10 S4S DEMENSIONAL LUMBER. TREATMENT SHALL BE A.C.Z.A. OR EQUIVALENT, 0.4 PCF RETENTION BY ASSAY, PENETRATION = 0.6" IN ACCORDANCE A.W.P.A. STD. SPEC.
5. ALL OTHER MATERIALS & DETAILS REMAIN THE SAME AS ON OTHER SHEETS.



DIAPHRAM DETAIL



MUD SILL DETAIL

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH:		
BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION

KETCHIKAN — SAXMAN RECREATION PATH — ALASKA
COAST GUARD ENTRANCE TO SOUTH TONGASS HIGHWAY
FED. NO. TE-0902(1B) ~ PROJECT NO. 71372

DESIGNED BY: BAS
DRAWN BY:

PROJECT NO. 71372
DATE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION

CHANGE ORDER

Project No.: TE-0902(8)/71372 Contract No.: _____ Change Order No.: 2

Project Name & Location: KTN-South Tongass Highway, Coast Guard Entrance to Saxman Recreation Path (Rebid)

Contractor: Rock-n-Road Construction

Address: PO Box 9083
Ketchikan AK 99901

SUMMARY OF CONTRACT AMOUNTS:

Original Contract Amount:	$1,231,585.00
Amount of Previous Changes:	-0-
Estimate of this Change:	$22,463.00
Adjusted Contract Amount:	$1,254,048.00

Recommended By: Gary P. McCallon Date: 2/27/96.
Gary P. McCallon, Construction Group Chief

Approved By: Barry L. Bergdoll Date: 2/27/96
Barry L. Bergdoll, P.E./ Construction Chief

Accepted By: ☒
Acknowledged By: ☐ Pres. Mgr. Date: 2/28/96
Contractor's Representative

The time provided for completion of the contract is ☐ unchanged ☒ increased ☐ decreased per description below

The following change(s) in the above Contract are hereby made in accordance with the terms of the Contract, and under the terms and conditions stated below. This document shall become an amendment to the Contract and all provisions of the Contract will be applicable.

DESCRIPTION OF CHANGE (Use Continuation Sheet 25D-065 as Required)

In accordance with Section 104-1.02, Changes, of the Contract Specifications, the following changes are hereby made:

ESTABLISH BID ITEM 513(1), STATION 131+50 Line Change.

DESCRIPTION: Bid Item 513(1), Station 131+50 Line Change, shall consist of the relocation of "R" line as shown on accompanying plan sheets, 38 & 39 of 40, and the details shown on sheet 40 of 40.

MATERIALS & CONSTRUCTION: Materials and Construction shall be in accordance with Sections 511(2), Welded Wire Walls; 512(1); Rockery, and 506(1) Treated Timber.

METHOD OF MEASUREMENT: Item 513(1), Station 131+50 Line Change, will not be measured except as noted in the Basis of Payment.

BASIS OF PAYMENT: The Basis of Payment for the work described in this change order shall be the agreed lump sum price of $22,463.00 and shall be full compensation for all labor, equipment, and materials to complete the work. Work performed on other items in the contract, including welded wire walls, rockeries, borrow, crushed base, and asphalt shall be paid for under their respective items.

Traffic control will not be affected by this change order.

Contract time will be extended three days as a result of this change order.

PLEASE INDICATE YOUR AGREEMENT BY SIGNING, DATING AND RETURNING THE ORIGINAL OF THIS DOCUMENT.

"R" LINE RECPATH CONTROL SUMMARY

"R" STATION	BEARING DISTANCE	NORTHING EASTING	REMARKS
B.O.P 109 + 39.72	S 37° 54' 25" E	7019.3597 24293.2563	
P.C. 110 + 37.59	47.97'	6981.5100 24322.7400	CURVE DATA Δ= 4° 41' 51" RT.
PT 110 + 52.29	S 33° 12' 34" E	6961.3200 24337.3400	R= 300'
PC 111 + 53.13	100.84'	6877.1300 24392.2700	CURVE DATA Δ= 2° 38' 01" LT.
PT 111 + 76.92	S 35° 50' 35" E	6555.7700 24400.0900	R= 300'
PI 112 + 38.29 BK.	51.37'	6315.0250 24435.0224	
PI 114 + 25.63	S 32° 47' 10" E	6659.7346 24539.4285	
PI 114 + 32.39	25.81' S 30° 11' 48" E	6611.3581 24569.0112	
PC 114 + 98.40	45.96'	6597.5247 24577.0613	CURVE DATA Δ= 8° 32' 43" LT.
PT 115 + 68.27	S 38° 44' 29" E	6539.9750 24615.5686	R= 458.48'
PI 116 + 18.94	50.67'	6500.4526 24643.2788	
PI 123 + 00.80	S 37° 02' 53" E	6028.3025 25133.3086	
PI 123 + 27.07	25.26 S 36° 57' 31" E	6007.3415 25154.1314	
PC 123 + 92.30	65.23'	5955.2153 25133.3525	CURVE DATA Δ= 2° 46' 56" RT.
PT 124 + 92.28	S 34° 10' 37" E	5873.8966 25251.5020	R= 2059.31'
PI 125 + 51.72	59.44' S 34° 44' 13" E	5824.7219 25284.5923	
PI 125 + 71.49	19.77' S 33° 49' 23" E	5808.4757 25296.1571	
[illegible] 125 + [illegible]	[illegible]	5731.3264 [illegible]	
PI 128 + 52.97	S 29° 08' 03" E	5564.1300 25435.7736	
PC 129 + 07.38	54.91'	5516.2145 25462.5083	CURVE DATA Δ= 23° 17' 43" LT.
PT 130 + 70.51	S 52° 25' 46" E	5393.9153 25563.3067	400'
PC 132 + 33.04	152.52	5294.3192 25636.3231	CURVE DATA Δ= 10° 27' 13" RT.
PT 132 + 44.69	S 41° 58' 32" E	5286.7732 25705.5129	R= 55.00'
PC 132 + 45.25	0.36'	5286.5032 25705.7553	CURVE DATA Δ= 11° 53' 55" LT.
PT 132 + 57.81	S 53° 52' 28" E	5277.4741 25715.7574	R= 55.00'
PI 132 + 87.08	29.27'	5260.2192 25739.3977	
PI 150 + 71.42	S 46° 42' 57" E	[illegible]	
PI 151 + 04.34	32.92' S 45° 47' 57" E	3887.1523 25894.7167	
PC 151 + 40.46	36.12'	3851.3734 26920.5080	CURVE DATA Δ= [illegible] 18" LT.
PT 151 + [illegible]	S 54° 29' 15" E	3840.1289 26946.7740	R= 225'
PC 151 + 80.51	5.93'	[illegible] 26951.5995	CURVE DATA Δ= 5° 00' 56" RT.
PT 152 + 04.58	S [illegible] 28' 19" E	[illegible] [illegible]	R= 275'
PI 152 + 20.51	15.9[illegible] S 50° 23' [illegible]	3811.5131 26982.6635	
PI 152 + 69.66	49.15' S 50° 31' [illegible] E	3780.1720 27020.5294	
PI 153 + 20.25	50.[illegible] S 5[illegible] 25' 07" E	3743.0117 [illegible]	
PI 153 + 70.60	50.36' S 52° 55' 24" E	3717.[illegible] 27099.4830	
PC 154 + 13.[illegible]	42.72'	3691.5432 27133.5714	CURVE DATA Δ= 2° 39' 11" LT.
PT 155 + 14.04	S 55° 34' 36" E	3632.7049 27215.3032	R= 21[illegible]
PI 155 + 71.37	57.33' S 57° 01' 56" E	3600.2986 27252.5907	
PI 155 + 20.85	49.49' S 5[illegible] E	3573.3589 [illegible]	
PI 156 + 69.96	49.10' S 59° 33' 43" E	3547.3589 27145.7558	
PC 157 + 51.65	81.90'	3505.8701 27416.2543	CURVE DATA Δ= 1° 53' 07" RT.
PT 158 + 50.57	S 61° 26' 50" E	3457.2710 27502.2790	R= 3000'
PC 159 + 21.12	70.56'	3423.5475 27564.2534	CURVE DATA Δ= 5° 57' 47" LT.
PT 159 + 52.35	S 67° 24' 37" E	3410.0770 27592.4049	R= 300'
PI 159 + 87.90	35.55' S 65° 45' 49" E	3396.4210 27625.2250	
PI 160 + 22.32	34.42' S 56° 11' 38" E	3352.2910 27656.5154	

"R" STATION	BEARING DISTANCE	NORTHING EASTING	REMARKS
PI 160 + 74.57	52.25' S 57° 32' 29" E	3361.2007 27704.4197	
PI 161 + 23.09	48.53' S 56° 27' 34" E	3342.5324 27749.2117	
PI 161 + 64.91	41.81' S 54° 39' 08" E	3325.3328 27787.5439	
PC 161 + 98.41	33.50'	3311.4905 27817.8198	CURVE DATA Δ= 11° 24' 45" LT.
PT 162 + 48.20	S 76° 03' 52" E	3294.7798 27864.5413	R= 250'
PC 162 + 57.20	9.00'	3292.6128 27873.3743	CURVE DATA Δ= 4° 37' 32" RT.
PT 162 + 89.49	S 71° 26' 21" E	3283.5800 27904.3685	R= 400'
PI 163 + 23.46	33.96' S 71° 50' 26" E	3272.7579 27936.5587	
PC 163 + 70.03	46.57'	3258.2553 27980.8144	CURVE DATA Δ= 7° 37' 22" RT.
PT 163 + 99.96	S 64° 13' 04" E	3247.0638 28008.5548	R= 225'
PC 164 + 02.88	2.92'	3245.7924 28011.1869	CURVE DATA Δ= 11° 51' 00" LT.
PT 164 + 39.08 BK.	S 72° 58' 56" E	3233.5200 28045.1682	R= 175'
PI 164 + 73.12	69.29'	3225.5136 28077.4422	
PI 177 + 23.18	S 57° 07' 15" E	2365.9101 28952.9400	
PI 177 + 73.87	50.69' S 60° 42' 00" E	2338.3925 28995.5097	
PC 178 + 25.81	51.94'	2312.9738 29040.8054	CURVE DATA Δ= 18° 51' 18" LT.
PT 179 + 14.99	S 79° 33' 19" E	2282.7936 29124.3029	R= 271.01'
PC 179 + 20.50	5.61'	2281.7763 29129.8216	CURVE DATA Δ= 5° 46' 30" RT.
PT 179 + 70.56	S 73° 46' 48" E	2270.2609 29178.4122	R= 495.54'
EOP 179 + 75	4.44'	2259.0207 29182.5755	

"PK" NAIL OFFSET SUMMARY

Sheet

"PK" NAIL NUMBER	BEARING DISTANCE	NORTHING EASTING	"R" STATION/ OFFSET	FIELD CONTROL POINT	BEARING DISTANCE	NORTHING EASTING	"R" STATION/ OFFSET
PK #1	S 38° 09' 36" E	7038.0380 24280.3760	—	101	49.97' S 54° 16' 36" E	3408.4030 27513.2100	159+72.19 6.45' LT.
2	50.04' S 37° 19' 30" E	5978.5730 24311.3930	110+17.47 2.00' LT.	102	50.02' S 56° 23' 19" E	3387.0870 27558.4610	160+22.03 5.13' LT.
3	50.06' S 36° 10' 36" E	5958.5810 24342.2400	110+67.33 2.91' LT.	103	49.96' S 57° 18' 27" E	3367.0770 27704.2370	160+72.03 5.30' LT.
4	49.97' S 35° 24' 29" E	5918.5370 24371.7350	111+17.24 5.49' LT.	104	50.01' S 67° 58' 55" E	3347.7430 27750.3600	161+22.15 5.25' LT.
5	49.98' S 34° 01' 35" E	5877.5010 24402.6910	111+67.29 7.38' LT.	105	49.92' S 58° 25' 35" E	3329.0270 27795.5420	161+71.76 6.78' LT.
6	50.01' S 33° 39' 18" E	6836.3300 24428.5690	112+17.51 5.94' LT.	106	50.00' S 69° 51' 51" E	3310.6440 27843.1350	162+25.55 8.95' LT.
7	50.00'	6734.4340 24456.0120	112+67.20 4.51' LT.	107	49.89' S 71° 21' 09" E	3293.4590 27889.9770	162+72.91 5.14' LT.
				108	49.98' S 71° 53' 15" E	3277.4870 27937.3370	163+22.69 4.72' LT.
10	S 33° 25' 31" E	6569.1040 24538.1600	114+17.18 4.14' LT.	109	50.01' S 72° 06' 10" E	3262.0080 27984.8940	163+72.57 4.85' LT.
11	49.94' S 33° 37' 42" E	6527.4190 24565.6840	114+66.83 5.21' LT.	110	49.94' S 71° 52' 11" E	3246.6600 28032.4200	164+22.58 8.95' LT.
12	50.07' S 34° 35' 39" E	6585.7300 24593.3780	115+17.06 7.83' LT.	111	50.05' S 71° 35' 23" E	3231.0850 28079.9870	164+73.85 6.08' LT.
13	49.97' S 37° 01' 51" E	5544.6480 24621.7450	115+67.85 6.96' LT.	112	50.02'	3215.2870 28127.4490	165+23.65 5.44' LT.
14	49.94' S 39° 26' 17" E	6504.7790 24651.3220	116+17.78 5.47' LT.				
15	49.92'	6466.2270 24683.5320	116+67.90 5.61' LT.	137	S 62° 12' 59" E	2342.9650 28997.9920	177+73.47 5.19' LT.
				138	49.94' S 66° 25' 48" E	2319.6850 29042.1770	178+23.72 6.52' LT.
27	S 39° 58' 47" E	6058.0030 25120.5700	122+68.36 4.51' LT.	139	50.03' S 70° 23' 37" E	2299.6920 29088.0410	178+75.07 7.19' LT.
28	50.07' S 38° 37' 25" E	6017.6440 25152.3330	123+18.07 5.17' LT.	140	50.08' S 72° 53' 01" E	2282.8390 29135.2130	179+25.68 2.10' LT.
29	50.02' S 37° 22' 11" E	5978.2660 25184.0600	123+68.06 6.61' LT.	141	49.93'	2253.2630 29182.9540	179+75.48 0.55' RT.
30	49.98' S 35° 49' 39" E	5938.8420 25214.3330	124+17.95 7.13' LT.				
31	49.97' S 34° 15' 39" E	5898.2200 25243.6350	124+57.74 7.36' LT.				
32	50.04' S 32° 34' 35" E	5856.9540 25271.8020	125+17.59 7.28' LT.				
33	50.03' S 31° 25' 44" E	5814.8060 25228.7350	125+67.76 5.73' LT.				
34	50.06'	5772.0890 25324.8400	126+17.44 4.45' LT.				
38	S 30° 14' 50" E	5597.5520 25432.5870	128+17.27 4.56' LT.				
39	49.98' S 32° 13' 56" E	5554.4340 25447.7550	128+67.28 5.75' LT.				
40	49.99' S 35° 44' 42" E	5512.2000 25474.4250	129+17.39 8.34' LT.				
41	49.96' S 40° 23' 54" E	5471.6480 25503.5140	129+68.52 9.73' LT.				
42	50.09' S 45° 36' 53" E	5433.5020 25536.0770	130+19.82 8.77' LT.				
43	49.95' S 50° 32' 09" E	5393.5550 25571.7720	130+70.66 5.98' LT.				
44	49.93' S 52° 43' 38" E	5365.8290 25610.3200	131+20.57 4.33' LT.				
45	50.09' S 52° 47' 30" E	5335.4330 25650.1310	131+70.66 4.59' LT.				
46	49.95' S 52° 01' 53" E	5306.2310 25689.9600	132+20.61 4.90' LT.				
47	49.91' S 49° 53' 59" E	5275.5730 25729.3390	132+69.88 6.45' LT.				
48	50.06'	5243.3270 25767.5020	133+19.34 4.53' LT.				
83	S 48° 19' 37" E	3914.0450 25873.0600	150+70.25 4.76' LT.				
84	49.97' S 48° 41' 50" E	3880.3170 25910.3650	151+19.99 6.38' LT.				
85	49.86' S 49° 17' 57" E	3847.3060 25947.3440	151+70.82 6.92' LT.				
86	49.96' S 50° 07' 58" E	3815.3240 25985.7230	152+20.36 4.88' LT.				
87	50.15' S 50° 56' 25" E	3783.1780 27024.2140	152+70.59 4.56' LT.				
88	49.95' S 52° 04' 19" E	3751.7050 27062.3970	153+20.70 5.01' LT.				
89	50.01' S 53° 03' 35" E	3720.9670 27102.4420	153+70.75 4.71' LT.				
90	50.07' S 53° 52' 46" E	3690.8750 27142.4520	154+20.84 4.81' LT.				
91	50.05' S 55° 13' 42" E	3661.3650 27182.9000	154+71.01 4.90' LT.				
92	49.98' S 56° 13' 43" E	3632.8590 27223.3580	155+21.10 5.02' LT.				
93	50.05' S 57° 02' 28" E	3605.0370 27265.5630	155+71.14 5.59' LT.				
94	49.90' S 57° 54' 11" E	3577.9870 27307.4270	156+21.28 5.59' LT.				
95	49.95' S 58° 57' 57" E	3551.3440 27349.7450	156+71.38 5.45' LT.				
96	50.04' S 60° 00' 28" E	3525.5450 27392.5240	157+21.42 4.94' LT.				
97	49.95' S 61° 13' 31" E	3500.5650 27435.5930	157+71.41 5.25' LT.				
98	49.95' S 62° 01' 34" E	3476.5240 27479.5710	158+21.45 5.96' LT.				
99	49.99' S 62° 59' 59" E	3453.0770 27523.8170	158+71.49 6.61' LT.				
100	49.97' S 63° 53' 36" E	3430.2300 27568.3420	159+21.45 7.96' LT.				

GENERAL NOTES:

1. FOR EXISTING GUARDRAIL AREAS SHOWN IN PLAN & PROFILE SHEETS, CONTRACTOR IS ENCOURAGED TO USE 2'-0" OFFSET FROM FACE OF GUARDRAIL (SEAWARD) FOR ESTABLISHING HORIZONTAL CONTROL FOR LEFT EDGE OF RECREATION PATH.
2. FOR NON-GUARDRAIL AREAS, CONTINUOUS TIES TO EXISTING PK NAILS HAVE BEEN PROVIDED AND ARE SUMMARIZED ABOVE AS THEY RELATE TO RECPATH STATIONING ("R" LINE) FOR THE PURPOSE OF ESTABLISHING HORIZONTAL CONTROL TO PATH LEFT EDGE IN THESE AREAS.
3. CONTRACTOR IS OBLIGATED TO CONSTRUCT THE ALIGNMENT SHOWN AS A MINIMUM CONDITION.

PATH:	BY:	DATE:	DESCRIPTION OF CHANGE:
P:\KTN\SAXBIKE\CP CONTROL 1=1			

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

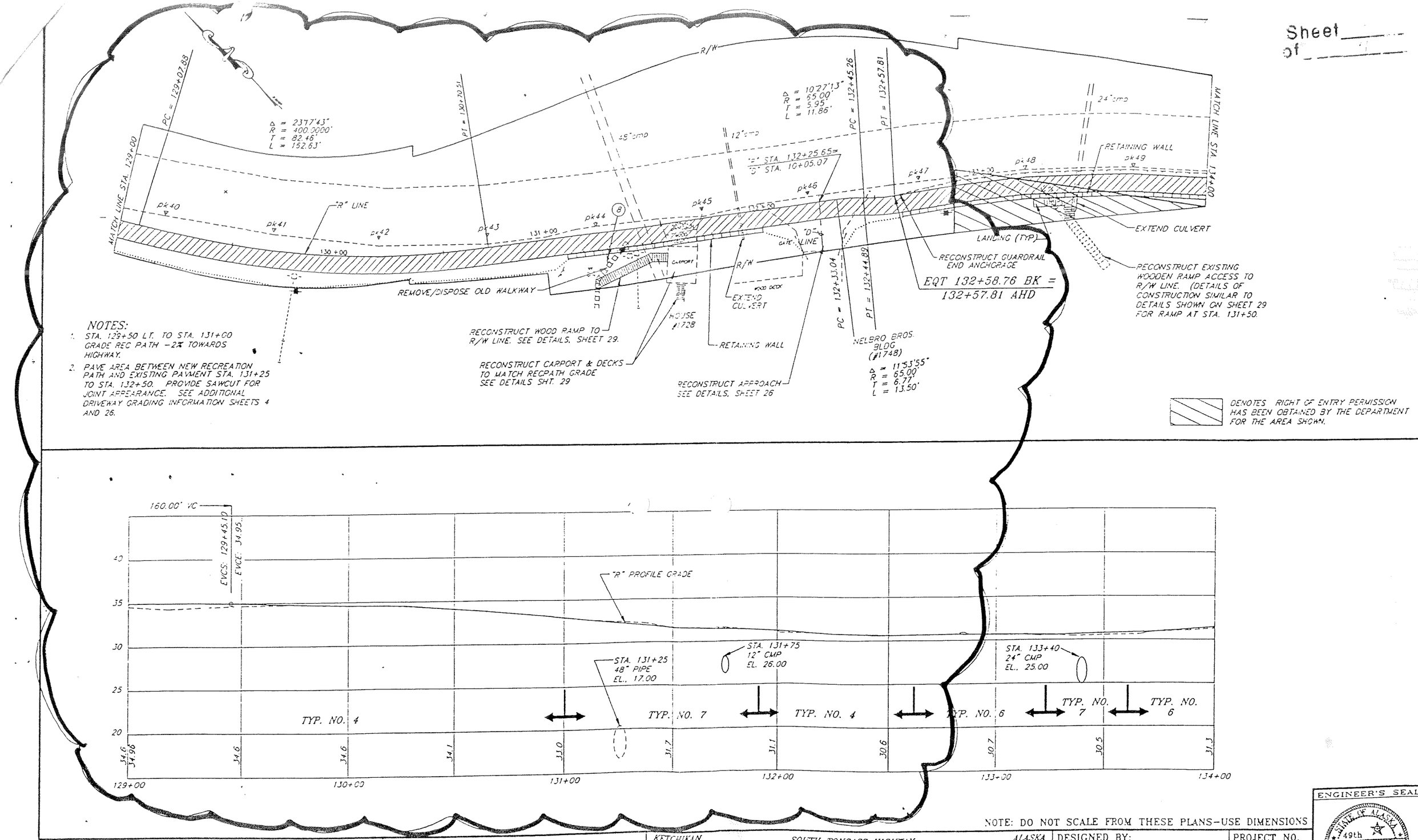
KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

HORIZONTAL CONTROL SUMMARY

DESIGNED BY:	W. HOLBROOK	PROJECT NO.	71372
DRAWN BY:	K. KLEMMETSON	DATE:	SEPT. 1994
CHECKED BY:	C. MORROW	SHEET	~~6 OF 33~~ 9-29-94

STATE OF ALASKA — 49th — [illegible] — CE-6355

Sheet_____
of_____



NOTES:

1. STA. 129+50 LT. TO STA. 131+00 GRADE REC PATH −2% TOWARDS HIGHWAY.
2. PAVE AREA BETWEEN NEW RECREATION PATH AND EXISTING PAVMENT STA. 131+25 TO STA. 132+50. PROVIDE SAWCUT FOR JOINT APPEARANCE. SEE ADDITIONAL DRIVEWAY GRADING INFORMATION SHEETS 4 AND 26.

DENOTES RIGHT OF ENTRY PERMISSION HAS BEEN OBTAINED BY THE DEPARTMENT FOR THE AREA SHOWN.

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: P:\KTN\SAXBIKE\DR\P29 1=20		
BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

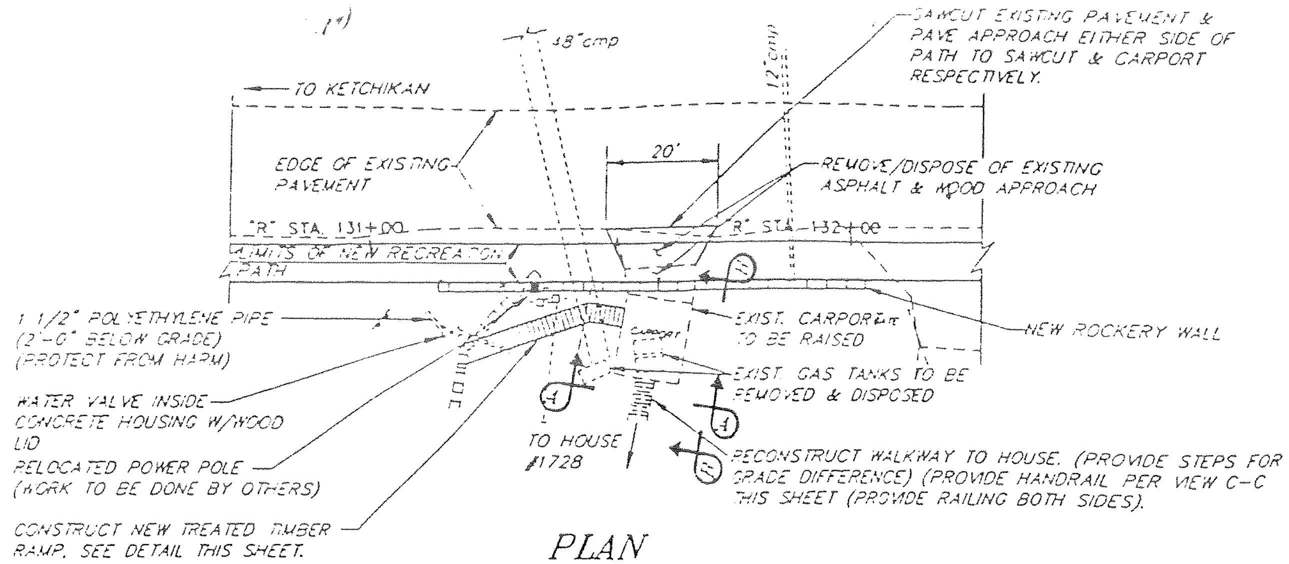
KETCHIKAN — SOUTH TONGASS HIGHWAY — ALASKA
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

"R" STA. 129+00 TO "R" STA. 134+00

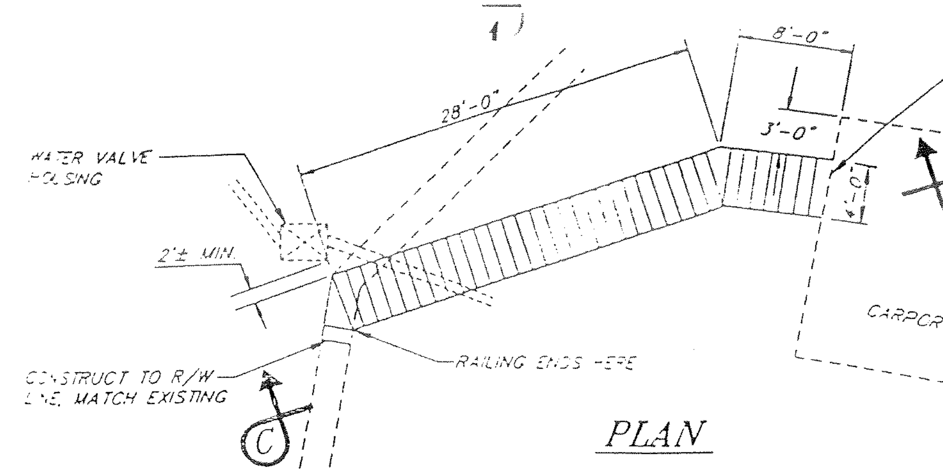
PLAN AND PROFILE

DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY: C. ANDERSON	DATE: SEPT. 1994
CHECKED BY: C. MORROW	SHEET

ENGINEER'S SEAL
STATE OF ALASKA
49th
W. J. HOLBROOK
CE-6285
REGISTERED ENGINEER
9-28-94



PLAN



PLAN

Sheet __ of __

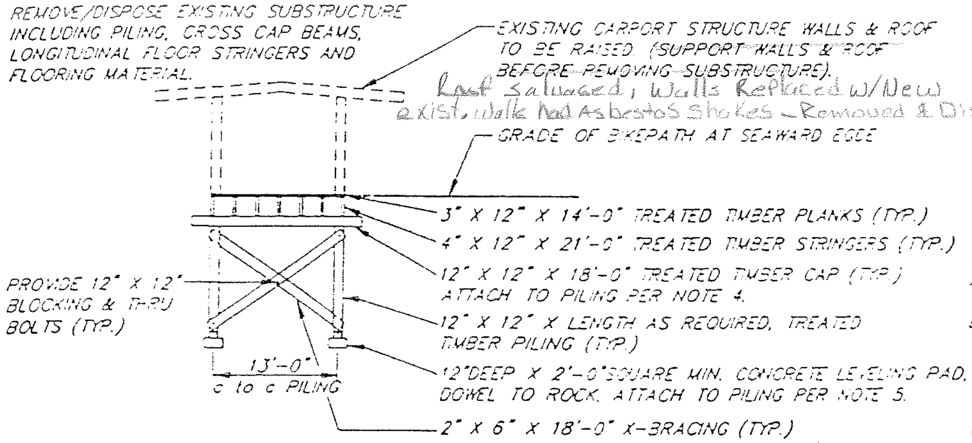
RAMP TREATED TIMBER SUMMARY				
COMPONENT	SIZE	WIDTH	LENGTH	THOUSAND BOARD FEET (MBM)
PLANKS	2" X 6"	6"	74 X 4' = 295'	0.30
STRINGERS	2" X 8"	8"	45 X 2' = 90'	0.12
POSTS	6" X 6"	6"	8 X 6' = 48'	0.14
X-BRACING	2" X 6"	6"	10 X 9' = 90'	0.09
HANDRAILING				
TOPRAIL	2" X 8"	8"	40'	0.05
SIDERAIL	2" X 4"	4"	40'	0.03
GUARDRAIL	2" X 4"	4"	4 X 8' = 32'	0.05
POSTS	4" X 4"	4"	5 X 4' = 20'	0.03
			TOTAL	= 0.81

NOTE:

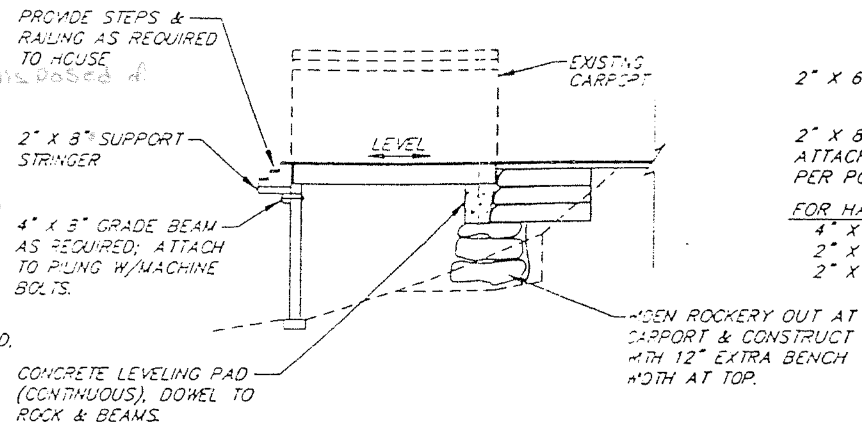
ASSUME 1.25 MBM TO RECONSTRUCT EXISTING WOOD RAMP AT STA. 133+40. SEE DETAILS ON SHEET 10 OF PLANS.

NOTE:

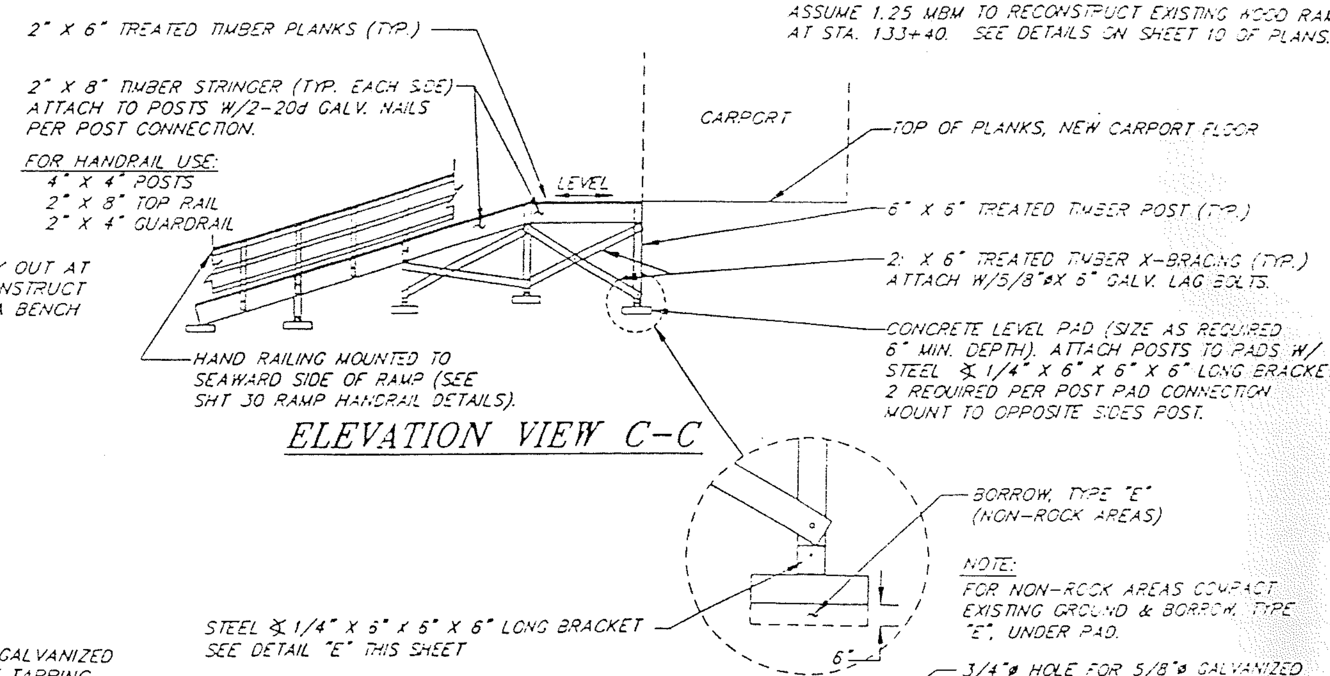
REMOVE/DISPOSE EXISTING SUBSTRUCTURE INCLUDING PILING, CROSS CAP BEAMS, LONGITUDINAL FLOOR STRINGERS AND FLOORING MATERIAL.



ELEVATION VIEW A-A



ELEV TION VI B-B



ELEVATION VIEW C-C

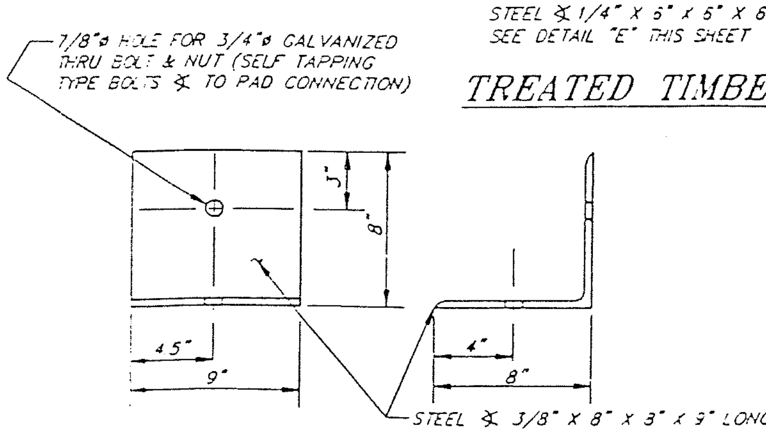
TREATED TIMBER RAMP DETAILS

CARPORT RECONSTRUCTION DETAILS
STA. 131+50

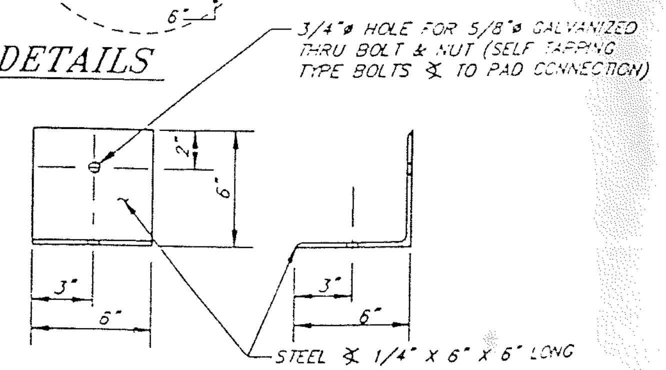
CARPORT NOTES:

1. SECURE EVERY OTHER STRINGER TO CAP EACH SIDE OF STRINGER W/ ∠ FROM DETAIL FOR POST TO LEVELING PAD BRACKET. SEE DETAIL "E" THIS SHEET. TOE NAIL REMAINING STRINGERS TO CAP WITH 3/8"ø GALVANIZED SPIKES. PREDRILL HOLES IN STRINGERS.
2. SECURE PLANKING TO STRINGERS W/ 2-6" GALVANIZED SPIKES PER STRINGER-PLANK JOINT. PLANKS SHALL BE FULL WIDTH, NO SPLICES OF PLANKING PERMITTED.
3. 5/8"ø GALVANIZED THRU BOLTS, REQUIRED ALL LOCATIONS EXCEPT BRACING 6" MIN. LENGTH LAG BOLTS ACCEPTABLE AND WHERE LOCATIONS CONFLICT WITH BEAM ENDS OCCUR.
4. SECURE CAP TO PILING WITH DOWELS AND STRAP PER VIEW F-F, SHEET 30.
5. SECURE PILING TO LEVELING PAD USING ∠ BRACKETS MOUNTED TO OPPOSITE SIDES OF PILING. BOLT THRU BOTH ANGLES. SEE DETAIL "D" THIS SHEET FOR ADDITIONAL DETAILS.
6. ALL TIMBER SHALL BE S4S, ~~1000~~ 1400 psi ALLOWABLE STRESS MIN., TREATED WITH ACZA OR EQUIVALENT PRESERVATIVE TREATMENT TP 0.4 pcf RETENTION BY ASSAY, 0.4 INCHES PENETRATION, IN ACCORDANCE WITH A.I.T.C. AND A.W.P.A. (C2) STANDARDS, RESPECTIVELY.
7. SECURE FACIA BEAM TO STRINGER EVERY OTHER MAIN STRINGER LOCATION USING DETAIL E ATTACHMENT BRACKET AND 5/8"ø ECONOMY BOLTS, NUTS AND WASHER. ECONOMY HEAD SHALL SHOW ON EXPOSED FACE OF FACIA BEAM.
8. ALL STRUCTURAL STEEL BRACKETS, BOLTS AND HARDWARE SHALL BE HOT DIPPED GALVANIZED PER ASTM A-153.

CARPORT TREATED TIMBER SUMMARY				
COMPONENT	SIZE	WIDTH	LENGTH	THOUSAND BOARD FEET (MBM)
PLANKS	3" X 12"	12"	21 X 14' = 294'	0.90
STRINGERS	4" X 12"	12"	7 X 21' = 147'	0.59
CAP	12" X 12"	12"	18'	0.07
PILING	12" X 12"	12"	4 X 11' AVE. = 44'	0.17
X-BRACING	2" X 6"	6"	36'	0.04
GRADE BEAM	4" X 8"	8"	14'	0.05
SUPPORT STRINGER	2" X 8"	8"	2 X 8' = 16'	0.02
STAIR STRINGER	2" X 12"	12"	1.5 X 8' = 12'	0.03
STAIR PLANKS	2" X 12"	12"	6 X 6' = 36'	0.07
HAND RAILING				
TOPRAIL	2" X 8"	8"	2 X 8' = 16'	0.03
SIDERAIL	2" X 4"	4"	2 X 8' = 16'	0.01
GUARDRAIL	2" X 4"	4"	4 X 8' = 32'	0.02
POSTS	4" X 4"	4"	4 X 4' = 16'	0.03
FACIA BEAM	2" X 12"	12"	2 X 14' = 28'	0.06
			TOTAL =	2.10



BRACKET DETAIL "D"
PILING TO LEVELING PAD



BRACKET DETAIL "E"
POST TO PAD CONNECTION

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: P:\SAX\BIKEPATH\DR\DETAIL4 1=20		
BY:	DATE:	DESCRIPTION OF CHANGE:
CNM	1/22/96	TIMBER STEEL SPEC.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

KETCHIKAN — ALASKA
SOUTH TONGASS HIGHWAY
COAST GUARD ENTRANCE TO SAXMAN RECREATION PATH
PROJECT NO. TE-0902 (18) 71372

MISCELLANEOUS DETAILS

DESIGNED BY: W. HOLBROOK	PROJECT NO. 71372
DRAWN BY: P. SNYDER	DATE: SEPT. 1994
CHECKED BY:	SHEET

ENGINEER'S SEAL
STATE OF ALASKA
49th
CE-5265
9-23-11